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RAILROAD STORIES

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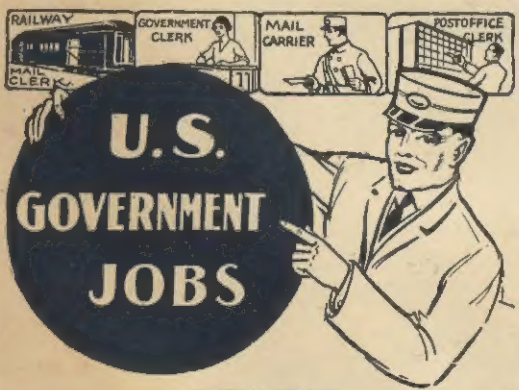

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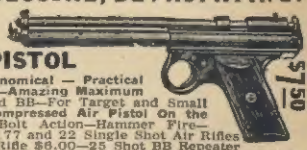

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RAILROAD STORIES

SEPTEMBER, 1936

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Vol. XX No. 4

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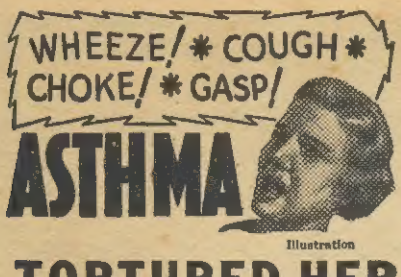

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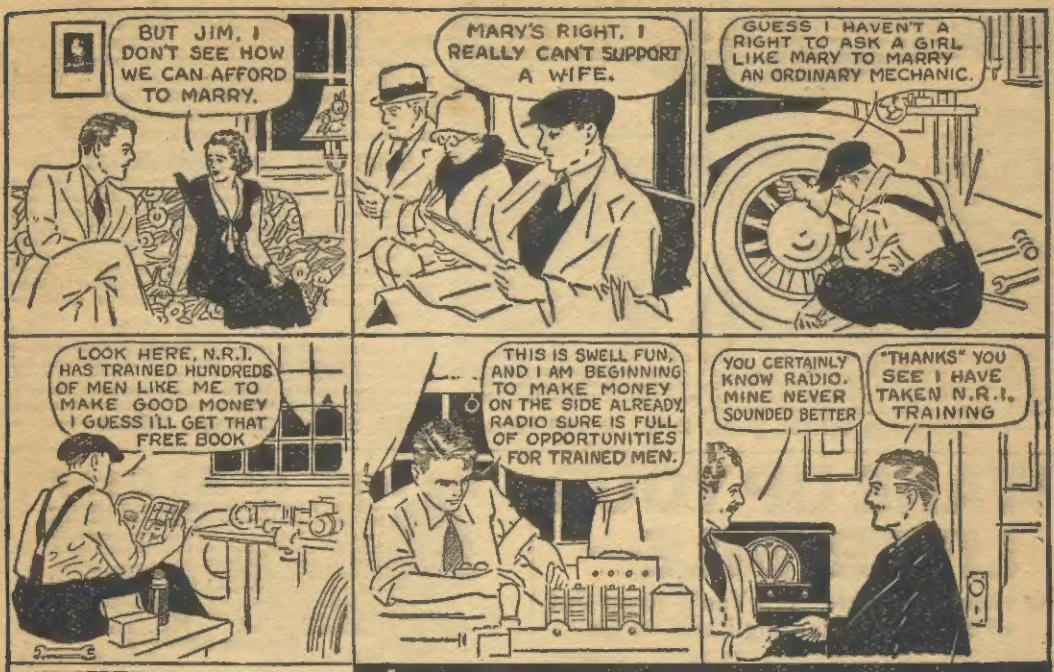
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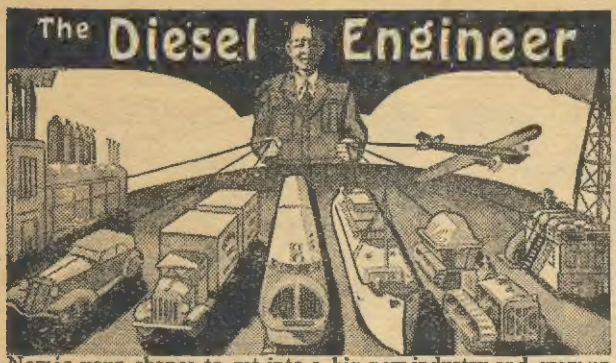

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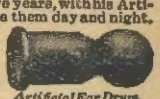

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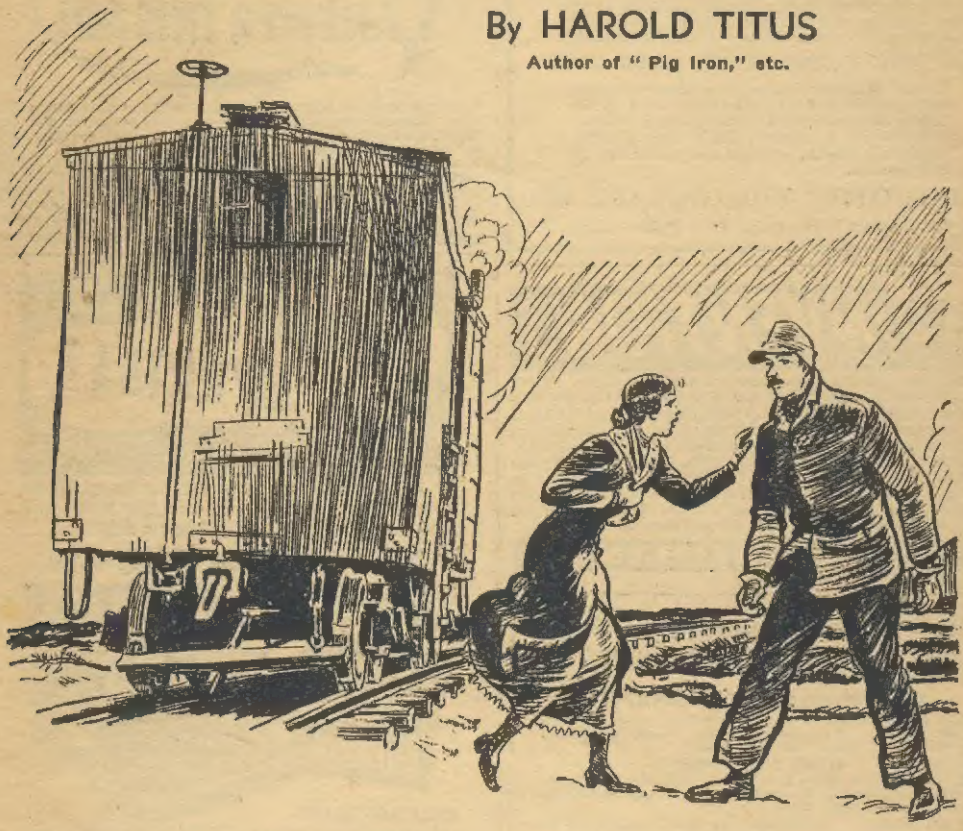
The Girl in the Zulu Car

By HAROLD TITUS
Author of "Pig Iron," etc.



SLIM McCANN, hogger on the Middle Division in the year 1883, knew that Riley was right when he said: "No matter how good a man might be, he needs his luck with MacLeisch." A lot of luck, old Riley added, and all kinds of luck. Except bad.

"The man isn't born," Riley explained to Slim, "that a railroad can't get along without. The division has yet to be opened that will get in trouble because one engineer misses promotion, even if he does deserve it."

Slim knew all this. He realized that MacLeisch could go on being the toughest master mechanic on the system—often as not banking his decisions on the basis of a whim and nothing more—and still be pointed to by officials as a man who got things done and backed up by them.

You see, MacLeisch *did* get things done. He drove and hounded his men. Boomers and soft-soapers didn't get far with him. Yes, sir, he was not pleasant to work for. You had to tend to your job and keep your mouth shut for fear of bringing down MacLeisch's disfavor by a little thing that most officials wouldn't notice.

A man of whims, I'm trying to say. Sour and surly and hard. The smallest

They'd Break Their Necks—Not to Get Katy Rolling Again, but to Keep Her Among Them!

things would turn him against a man. On the other hand, a lad who was just no good at all *might* find himself in luck because of these whims of the master mechanic. Not often, but every now and then.

Now, Slim McCann knew he was good, as engineers go. He also knew that a half dozen in the chain gang were his equals, and even if a master mechanic weighed everything carefully and calmly he'd be stumped to pick the one deserving of promotion. Add the fact that Ed Noble was giving up his passenger run for a Dakota homestead, and somebody would get his place. And on top of all that, Katy O'Dowd came in.

Katy had been in the yards waiting for that ramshackle Erie box car to be repaired for five days and nights. Half the lads on that division were off their heads about her while the other half were pop-eyed with watching the show; and not a whimper of it got to Slim, although he was in and out four times in those five days.

That's how full the young hogger's head was with the chance of stepping up a rung, and it was finally going to take a hot box on his own train to make him know that such a girl even lived!

Katy was an emigrant, see? Westward bound with a car full of household goods. It's called a "Zulu car,"

God knows why. It was old and ramshackle, like I said.

Extra 764 nursed that rolling ruin in, and it was spotted on the rip track, and word about Katy ran like prairie fire. And did the men come flocking? If there'd been somebody from the paymaster's office sticking his nose in for an eyeful of her, every branch of the system would have been represented.

Judging from the fuss the repair crew made you'd have thought that car was the most important ever billed out of Chicago. From the *fuss*, I say. Not from what was done about it.

"Hum," said Hoxsie, the shop foreman, who went out to the car himself as soon as he heard about the girl in it. "Hum," he said and "Haw," and "Hum," again.

"Now what a shame!" he said after a glance at the broken arch-bar and a long look at the girl.

Her eyes were sea blue and her brows like careful brush marks. She was tenderly small and her cherry lips had a fluttery way when she glanced at a man.

"Listen," she said in a husky voice. "Will it hold me here long, misther?"

Hoxsie twisted his head and said again it was a shame, and then explained he had no arch-bar for a foreign car.

"Sure we have!" put in one of the lads, short on guile and all upset by Katy. "There's one from that Erie car that burnt up—"

But Hoxsie cut him short, talking fast to get Katy's attention off the boy's shocked look.

"No bar to fit that," he said, "and two road engines to get back into service before another tap's done. A rush like this is somethin' terrible, little girl. Alkali water west 'nd all you folks in such a hurry nobody has a chance to keep things clean 'nd tight. A shame!"

Katy sighed, as if shop troubles were beside the point.

"My Zulu car's no good," she said. "Couldn't you put my goods in another?"

"Why, dearie!" said Hoxsie, who let no grass grow under his feet. "Why, dearie dear! It'd be easier to take elephants out of a silk hat than find a serviceable empty atwixt Chicago 'nd Pierre!"

The girl shook her head and her chin trembled. "My people," she explained, "are waitin' at Pierre for the goods. It's uneasy they'll be."

"Another shame, makin' three shames," said Hoxsie. "But we'll break our necks to ease their minds, dearie. We'll do that."

NOW, making an arch-bar before the day of steam hammers was a slow job at best. Other work was pressing for certain in that winter of 1883 when endless trains of emigrant cars rolled westward, bound for homesteads claimed the summer before. But . . .

Break their necks? Perhaps. But not to get Katy rolling again; rather, to scheme ways to keep her among them.

Little good it did the ring-leaders at first, too. Katy had been set out before. That broken bar was but one of a series of mishaps. She knew the ways of getting back into a train in a rush, it seemed.

That first night she could have gone to a dance with Hoxsie, who was reckless about being married, and with the car checker and an operator and several others, mostly bright lads and single and neither hard to look at nor listen to.

But she did not. She went with

Swartz, the yardmaster, a gnarled and leathery widower—which showed how much interest she had in anything except getting on. It would be Swartz who could, if of a mind, put her into a train the hour her car was ready.

That gave the boys something to talk about, indeed, as did the following scramble for her smiles; and Slim McCann never heard a word of it! Never knew that such a girl was on earth until the morning MacLeisch rode out with him.

But MacLeisch knew it, and Katy softened his eye and provoked his chuckles and caused him to be almost amiable to others when he was near her in those five days that Hoxsie dallied making an arch-bar.

Why it was only five days, is a question. Perhaps Hoxsie gave up trying to impress the girl himself and let the job take it course. Or possibly he helped get Katy out to spite MacLeisch who, middle-aged though he was, took her to a dance the second night, proving himself more favored than the shop foreman.

Or again, it may have been on the master mechanic's own orders, because getting the girl on the road away from those younger and handsomer men would relieve him of some competition, at least.

But no inkling reached Engineer McCann, who was concerned with opportunities that had nothing to do with panting after women.

DAKOTA was open. The front of steel had reached Pierre, and emigrants rolled through until one would think that eastern states and half the old countries were being emptied to make a bustling land of what had been Indian country yesterday.

Every train had another on its tail. Extra freights carried flags for passengers. A train or engineman got in forty, fifty, even close to sixty days a month; and if he had one fair night's rest in ten he was frittering his time away.

Every yard from Chicago to the Missouri was plugged with freight gone dead to get the people to destination — freight which, when the rush was over, would come alive and build homes and cities on the high prairie.

Slim had made his choice. He was a railroader, body and soul. He loved it. The company was hiring with both hands and borrowing engines from other roads, and still was all snarled up. Promotions popped like corn on coals, anyhow; and now that old Ed Noble had the itch for land, a passenger run would go to someone with luck.

It wouldn't have been just luck if Riley had stayed well. But Riley was sick, so MacLeisch had his old place. Riley had been master mechanic when Slim went wiping. He had an eye for ability and was no man to move on whims. In six months he put the kid firing, and over on the right-hand side within two years.

Riley liked Slim all right enough, but now Riley was in bed, with the final board against him; and MacLeisch, with his whims ran things.

"Nobody he's got's more deservin' nor you," Riley said when Slim dropped in to tell him about Ed Noble's land itch. "Young, yes. That might give Mac a whim ag'in' ye. You'd ought to marry 'nd settle down."

Slim gave him a look.

"Sakes!" Riley went on. "I'll bet ye can't even dance? Right? Knew it! And I'll bet ye ain't courted a girl since you got 'n engine. Right again? Sure! . . . But bein' settled might

help. Still, I dunno . . . He might do this 'nd he might do that. Depends on his whims. You'll need your luck with him."

"I know," said Slim. "You have to have luck with a man who goes by whims."

The young hogger thought he was having luck with MacLeisch that morning when the master mechanic climbed into the cab to ride with him. A "master maniac" rides with an engineer when he's having trouble, but Slim was not in trouble. Or he rides when he may be in doubt about the man, but he could have no doubts about Slim McCann with his fine record for getting trains over the road, let alone the proof of his coal tickets that he got twice the miles out of a ton as many of the other men got.

And, again, he may ride with an engineer when he's thinking of that fellow's future. This, Slim decided, must be the reason for MacLeisch's ride.

THAT'S what one gets for thinking about his job so hard. He develops deaf spots and blind spots and barren spots in judgment.

He hadn't attributed any importance to the group by the door of that Erie car in his train. It was like any other Zulu car to Slim, with a stovepipe through the door and likely loaded to the roof with furniture and implements and, maybe, transporting a cow or a team, and occupied by some settler in a fever to get to Dakota. Slim was busy oiling and didn't catch the regret and what-not in men's voices and if he heard that husky, throaty laugh he probably put it down to a trick of the raw wind. Surely, no such sound belonged in a railroad yard in the dark of a March morning.

And then came MacLeisch, saying curtly that he would ride, and Slim's young heart climbed into his throat as the switch engine began to push and help him out of town with those fifteen frostbound cars.

In the firebox glow he had a look at MacLeisch, bleak-faced, stern as a judge. Stern and hard and acting without good reason half the time. Oh, a man needed luck with what was behind a face like that, he did!

But before even the best of luck can help, a man must be good, and one thing Slim could do then and there was show MacLeisch how to handle stiff cars on a frost-slick rail.

They hung and clung and didn't want to go. He worked her in the corner and made them move and widened on her and, though the exhaust threatened to beat the stack off, the drivers never slipped once to pull holes in the fire that danced on the grates.

He had his sand lever just so, putting enough grit on the rails to give the tires a hold but not enough to hamper the coming car wheels. He had his throttle right to a hair, giving her the last ounce she could get rid of and not another fraction to clog her . . . Such things, that make an engineer fit for promotion.

The fireman swung like a pendulum. The gage stood at a hundred and sixty. The screech of those cold journals was like the screaming of a mad kid being dragged home despite his heels dug in the ground. They didn't want to roll; they wouldn't loosen up; they squealed and yelped that they would not. . . . But they did.

By the time the caboose was out on the main line Slim was hooking her up; when the switch engine left him alone he had her in half stroke. In another mile he had a swing on them,

and in two the engine was running like a watch and the fireman was straightening his back; when, Slim would bet his life, half MacLeisch's men would have dragged the steam down and had the fireman still bailing coal and yet be in danger of stalling.

He wheeled them hard to Stockton, with never a grunt out of MacLeisch. The hill engine coupled on, and as dawn ate through the murky east it let go after ten miles of mountain grade. By this time Slim had them out of the Mississippi Valley and beyond the worst of it. Biting at his plug, he hitched about for a look at the hind end so he could see Mac.

But the master mechanic was looking back himself, and the head shack gave Slim McCann a wink as if the two of them knew all about something, the brakeman not realizing how close a man can hold his mind on his job.

Slim hung onto them around a tough curve and whooped at a grade and got almost to the top before he had to work her, and still no move from MacLeisch. Damn it! Couldn't that guy show a little appreciation?

Then the brakeman yelled: "Hey! . . . Hot one!" Slim shut her off and was whistling for brakes before you could bat an eye, and swore some at having to stop there to cool off a journal with a train twenty minutes behind and a meet at Utica.

MacLEISCH was standing beside the rear of that Erie car when Slim, after giving his wedges a little oil, walked back to see what the train crew was doing about it. The head brakeman was sloshing water into the hot box while the conductor was coming up with the dope pail.

Slim scowled incredulously at the girl standing there in a long, dark cloak and something red and knitted on the coils of her black hair. She looked full into his face as he stopped. The young hogger realized for the first time what it was to have his breath knocked out by a look.

They hooked smoking waste out and looked at the brass. MacLeisch clicked his tongue and said:

"Hard luck, Katy! That'll break any time. Have to set you out."

Set out? Slim blinked. For a brass not half worn through and good for thousands of miles? The man must be crazy, he thought. His eyes wandered from the brass to the master mechanic who was looking at the girl. Then he sensed that MacLeisch was as crazy as they get. Even a man without his breath could see the M.M. was crazy!

The conductor nudged Slim and chuckled as Mac helped the girl back into her car.

"Gives him a chanct," he wheezed. "Mac's got her out by hisself, now," but still Slim did not understand.

They set the car on the Utica house track. MacLeisch stayed there to telegraph for a car repairer, he said. After they were out of town the brakeman went over and discovered to his amazement that Slim knew nothing at all about what everybody else knew.

"Sure thing! Schemin', see? That brass! Ho! And waitin', all right, but it ain't for a car repairer, you bet your shirt!"

Slim put his head out the window to get it straight in his mind. A master mechanic, old enough to be the girl's father, lingering with a "bad order" car because of who was in it. The thing was so preposterous, and that sensation of having had his breath knocked out by a look was so puzzling that he ran St. Charles when he had intended to take water there.

With seven more cars from Waseca he got over the Middle Division to Tracy before doubling back, running light and rapping it eastward. He was bound to get a bit of sleep before called to grab more Zulu cars and wheel the emigrants westward. He again had a meet at Utica and was down oiling when Katy O'Dowd came into the mellow light of his torch.

"Listen," said she, plucking at his jacket and the sound and feeling made something jump inside him. "Listen," she said, "have these conductors no reason?"

"Reason?" he asked helplessly.

The flutter of her lips made him squeeze the waste in his hand.

"It's lookin' forward to when I can get on, it is," she said, and the lilt in her voice made of the waste a tight ball. "By tomorrow I've Misther MacLeisch's promise there'll be new brass in my car, but how to get into a train addles me. To three conductors, I've talked," she said, "and each demands his price and I've naught to offer."

Slim nodded silent understanding. He knew the lucklessness of an emigrant set out at a station other than a division point. They might be neglected for days by harried dispatchers. Conductors going through might have no orders to pick them up but still no orders forbade it.

So fifteen dollars was the standard price, with a greenback or so each for the rest of the crew and the remainder for the conductor himself, and it was worth all of that to get back to a point where something had to be done about you if trains were to have room to get in and out.

"It's my people," she said in that caressing voice. "Our savin's were spent for stock and tools; and the stock's at Pierre, where our claim is only five miles away, and the tools are here, and they're needed for the buildin' of a house so the breakin' may go on when frost lets go. And these conductors have no reason, although," she said, more to herself than to Slim, "it is only the oldish ones I've chanced to talk to so far."

A headlight showed far away.

"Bad luck!" he said, and picked up his torch. Time to get going again.

SO she had talked only to oldish conductors? Slim whistled lingering for a crossing. But how could a man ever let mere years make him unyielding to a voice like that and eyes like those and the way she'd pluck at you as if to draw all your understanding and sympathy right into her lap?

And how could a cross-grained rawhider like MacLeisch scheme to hold a girl on his division and take time from his turbulent job to listen to that voice and watch those eyes?

A prickle of resentment ran up the hogger's spine and he scowled at the gage. That, however, was the business of MacLeisch. A man wanting to get ahead tended to his own affairs, he did!

But the next noon when he batted through Utica with a caboose in sight ahead and the next section hard on him, he had time to take from speculating on how little brakes could do in a place like that and to glance at the Zulu car, with a repairer jacking it up and MacLeisch looking close at Katy who had a coaxing curve on her lips.

And then he had to club a rising impulse and tell himself that a man would be a fool to give any girl so much as a look when MacLeisch was off his head about her. Why, a whim of the master mechanic might as well send that man off the payroll as not!

But he could listen, he could, to what was said here and there. Which was plenty. MacLeisch was gone, for certain, and it was even rumored that, although he had no jurisdiction over the man, he had given the Utica agent to understand that he was not to let the bill for that car pass to any conductor until he—MacLeisch—said so. Determined to hold Katy there until he got whatever it was he wanted, see?

And the laugh that went around when Katy coaxed her way into a train despite him was as long as it was loud; except, of course, when talk got to what happened afterward on Eyota Hill, or, for that matter, what happened before they reached Eyota.

Old conductors might hold out for their money, and young ones who might be susceptible to an adroit bit of blarney, but anyone who had an eye to the future would not want to cross Mac.

The young boomer conductor who listened to Katy cared more for the curving of her lips than he did for the dollars she might have had but did not; and, like all boomers, took his job lightly. So he filched the bill from that depot office, cut the car in, and away they went.

There also was a laugh on the boomer when it was told how he tried to get into the end door of Katy's car while they were rolling and was held back with a pitchfork. Oh, no, there was nothing raw about this Katy O'Dowd!

But at the rest of the story there was no laughter at all. Braking for St. Charles Hill, you see, the conductor had shoved his club into the wheel of that Zulu car and put his weight on it just as the flawed chain gave up. This sent him off on his neck. Had it not been for a ditch full of soft snow, the incident might have killed all interest in the thwarting of both MacLeisch and the boomer.

NOW, picking the man up caused delay. As a result the hogger worked his engine hard, and on the grade west of Eyota Hill the drawbar on Katy's car pulled out and away it went backward, shoving the caboose and picking up speed.

The boomer was stretched out on the long seat and the brakeman was five cars ahead when the hind end broke away. The hurt lad had a time of it getting the brakes set with his sore muscles.

But for the grace of plenty of straight track, the runaways would have gone through the following section. As it was, the engineer got his train stopped and was backing up when they came together, so little damage was done to anything except the reputation of Katy's car. Before then, it had been a joke; afterward, the lads came to regard it as a menace and wanted no truck with it whatever.

They chained it up and set it off. Once again MacLeisch appeared to urge a "bad order" report for the master mechanic's attention. But he was not present when Slim had a half-hour's delay there at a meeting. The young engineer saw Katy through her half opened door, the day being what a March day can sometimes be, and walked over and recognized the dire trouble in her face.

"T is you, Misther McCann!" The sound of his name, coming from her fluttery lips, was the sweetest sound ever. "And will it be you who'll give me hope of gettin' on early?"

"Don't fuss," he tried to say soothingly because her dismay hurt him. "You'll get along."

But her lip trembled, which was different from fluttering, and she said that her people would be in a state. She wanted to know how long they would be fixing the drawbar.

"It might be a short wait," he said, thinking of the preciousness of track room. "Or it might be long"—considering MacLeisch and the hard way he followed his whims. Slim wanted to promise to smash the master mechanic's face in if he kept on like this.

But he did not say it then and had no chance to say anything to the girl for two days, because the trainmaster came out of the Tracy eating-house with a dinner tray in his hands and worry in his eyes.

"Eat hearty!" said he, handing the food to Slim. "Can I fetch you some beer? . . . Well, then, could I persuade you to take them through? There's no place here to spot an engine, even, and the same's true at Huron, Can we get this train to Pierre, now, it'll help us. And think of your mileage!"

SO Slim wheeled them to Pierre, being twenty-five hours without a wink in doing it. He stood outside while the conductor boiled chicken on the caboose stove and he watched the switch engine shove his cars off onto the frozen prairie.

Construction had halted with winter. Pierre had no adequate yard, so the westward plunge of occupants for this new land had caught the company short. There was no place to put them except out beyond the end of steel.

Those Zulu cars covered an area as big as a homestead and a tree claim together. Perhaps half again as big, he reckoned. Maybe even double that size. Each stovepipe belched smoke as the people kept warm and waited for spring to let them reach their land and throw up shelter. But Katy's people had not waited, it seemed. Forehanded, they had decided to go ahead.

Five miles from Pierre, she said. . . . And if MacLeisch knew what was in Slim's mind he'd be in the chain gang for life, because talk about seniority rights had gotten no place yet. Still, railroading wasn't the only thing a man could set himself to. Take Ed Noble, for instance, Ed was a hard-headed old citizen and was giving it up for a claim to prairie acres.

Slim's heart beat fast. For so long now he had been pointed in one direction that it was disturbing even to consider change. But his brows gathered. He couldn't stand for anybody, MacLeisch not excepted, setting such trouble in Katy's lovely eyes, he couldn't. Still . . . The railroad was his first love; it had claims on his heart. . . .

"Misther MacLeisch, he's generous with his promises," said Katy when Slim saw her next, "but stingy with makin' them good."

It was then that Slim replied hoarsely that he'd bash the master mechanic's face in, frightening himself somewhat by that audacity.

"Oh, you do be promisin' to fight for me?" the girl cried. She plucked at his sleeve while many things were reflected in her eyes, among them inspiration and hope and a sort of invitation.

"Don't do it, Slimmie! Don't be putting your head in a noose for the likes of me," she said. "I've heard of him, and how he does thus and so for no good reason! And if you gave him such a reason—"

She moistened her lips and smiled. Slim knew she was pleased. Compared to that, Ed Noble's run or any other promotion was as the prairie dust!

But now tell me, Slim, how might it be gone about to get around the hunger he swears he has for me? Fighting will do little good, might only delay me longer. That boomer conductor, now, he had a head on him. Schemin' is always the quickest way."

FOR a week MacLeisch held the Erie Zulu car at Eyota and did nothing about repairs. Slim McCann made the tank for water and had meetings there. Once he was delayed by a derailment and sat with Katy by the tiny stove in her car and listened to her talk and, at times, did not listen at all for trying to say what he had to say to her. . . .

"What's this I hear?" Riley demanded next time he saw Slim. "Runnin' on the master mechanic's time? Are ye daft, son?"

Slim twisted and growled some.

"Everybody knows," declared Riley. "Everybody but him. Your friends are protectin' you by conspirin' to keep word of your courtin' from his ears but that will end. Are ye daft?"

The young hogger would not tell even Riley of his reckless dreams, but he did tell them to Katy the day she got rolling again only to have a brake-beam drop from her rickety old relic and hook into a frog in the Rochester yards and snarl cars up so the wrecker had to be called.

This gave Slim a chance to sit with her again and stroke her hand gently as she sobbed out that the devil was after her.

"Only him?" he asked. "He should be easy to escape after shaking MacLeisch. How'd you do it, Katy?"

"My people, they sent me money. I'd written them and they mailed it back. The hour the drawbar was placed in this old failure, I was standin' by the track, bills in me hand, waitin' for a conductor whose love for dollars was greater than his fear for MacLeisch. But now I'm broke down again and have no money, with every conductor on the road thinkin' this car is possessed and MacLeisch takin' his time and—"

"Damn MacLeisch!" swore Slim. "I'm not afraid of him! There's other things than railroads a man can turn his hand to!" He swallowed drily, having renounced thusly his first love. "Rochester will swarm with car repairers, now, because of this derailment, and I'll get you on to Pierre my own self or my name's not McCann!"

Oh, the light in her eyes. It made him reckless, made him heedless of all he'd ever planned or hoped for.

"I'll take you to them, your people!" he said audaciously, pulling her closer by one hand. "I'll quit this crazy work for a crazy man! And I'll get me a claim near your people's and —then—then—"

"Ah, Slimmie! What a brave, thoughtful man! And it's so happy I'll be!" she cried. "And so happy my people will be because the letter tells that every day they'll be drivin' in to see if I've come."

She talked so rapidly of the joy that would be her family's that Slim had no chance to try to say the things highest in his heart: that, once a claim was his, and a house built upon it, he'd be asking her to come there and abide with him for ever and ever.

THAT night he rolled eastward with a sense of having crossed a dividing line. Pangs in his breast, to be sure; pangs that would grow instead of diminishing with time. A lad can't dream and plan from youth into man-

hood on one thing and live for it and with it and then discard it easily.

The pangs would grow, yes, but he dulled them by picturing himself with Katy O'Dowd and her people, selecting a claim not too far from theirs and listening to Katy tell how, but for him, she might not have reached there by days and weeks.

He would not wait for MacLeisch to vent his wrath. He'd turn his hand to something where a man would not be ever fearful that the luck he needed with a superior might fail, and some day he'd parade his wife to let Mr. MacLeisch see what he had missed and who had caught it!

But, even so, he had to fight down regrets consciously. He'd been so very happy, rolling his trains and dreaming of a passenger run and even things beyond it. No, indeed. Long-seated dreams are not easily discarded.

Right, he'd been about the repair work. And as right was Katy about the potency of her car's reputation. All the damage at Rochester had been repaired, but of the derailed cars hers alone remained there when Slim pulled his conductor in the next day.

He went to her, and then into the caboose, saying: "We're takin' that Erie car."

The conductor's jaw dropped. "Man, are you crazy?"

"Likely, but we're takin' it, the same."

The con put his bills down and tugged off his spectacles. "But, man! MacLeisch! And she'll ditch us for sure and—"

"I've looked it over myself," said Slim stoutly and when he saw the adamant look in the other's eye went on: "We take it and we ask no money for the favor. Because why? Because, if we do not, then so long as I pull you, my buckoo, there'll be no pickin' up of cars for which there are no orders, which means no easy money for your wallet!"

Now, that settled that. A little talk with the fireman settled the next item, leaving Slim free to walk into the dispatcher's office at Tracy, with a smudge of grease on his nose and a queer ring in his voice, and offer to take them through to Pierre again. This offer was received with gratitude, engineers being so scarce.

So he rolled on with Katy in this train. He took his first alkali water at Lamberton tank, keeping it low in the boiler as a man who knows bad water should, which half the men even on those Western divisions had not yet learned.

Slim wheeled them as he had never wheeled before. He saw the brakeman, a new man, hanging on and whimpering. He caught the admiration in his fireman's eyes. . . . Oh, he could drive an engine, he could, and damn the regrets that he was to do it not much longer!

A TOUCH of spring was in the morning air as he rolled into Pierre and got down, a little weary, and started back toward the hind end, wanting to be present when Katy opened her car door.

But it was already open. And Katy was hanging out. A team hauling a wagon was coming at a gallop, a man and woman waving from the high seat and a great array of children yelping and screeching from the box.

The horses sat back on their haunches beside the Zulu car, while the man driving caught Katy with one arm and drew her across to the seat and smothered her with arms and kisses. The woman wept and the children kept

screaming. It was quite some time before Katy could still them, and see Slim, and beckon him close.

"Ah, Slimmie, you did it, so!" she cried, tears in her sea-blue eyes. "You did it, lad! And these are my people, my mother, my father, me brothers and sisters. And this is Slim McCann," she said to them, blushing brightly, "except for who I'd still be sittin' some place beside the main line!"

Handshaking and stares. Stares for Slim, yes, but more from the O'Dowds for Katy because of the queerness in her eyes—that strange, unearthly happiness that not even a reunion with her own blood could inspire.

A passenger train pulled in behind them but they did not notice. They talked and talked, words fair tumbling over one another and voices all in a snarl; until Mr. O'Dowd said he had feed to load, which he would do first and then be back to load what he could from the car.

Slim and Katy were alone then, with the sweet, gentle wind blowing her hair about her little ears. He reached for her hands and held them.

"Now," she breathed, "you'll be leavin'?"

"Not now," he said. "Not never!" he said. His voice was stouter as he fought against regrets which would not down. "I've got down from an engine for the last time," he said, and his voice trembled a little.

Katy was so busy studying his suffering face that she did not notice the one coming along the train.

"It's claim lookin' I'll do this day. And it's claim filin' I'll do next. Drat railroadin'!" Slim cried, in something of a panic because he was trying to make himself do the impossible. "It's *you* I want, Katy darlin', not a job on an engine!"

His voice actually shook and moisture formed in his eyes. She crept closer into his arms, close and closer. Her hands pressed against his shoulder blades and her cheek lay on his breast.

"Are ye sure, Slimmie?" she asked.

"As sure as I stand here!" he cried, lying. "It's land I want, not engines!" —voice all but breaking. "And besides, should I want to stay by th' company, there's MacLeisch—"

"*Here's* MacLeisch!" a harsh voice broke in.

HE whirled, then, holding Katy close, to meet the hard stare of the master mechanic himself. A hard, odd stare, that, going from the girl's face to Slim's and back again. Then his head began to shake.

"I heard what had been done," he said harshly. "I heard what trick you'd played, McCann, to get this Erie car on! I had business here but I came first to say to you it's an unusual man who'll cross me so!"

His eyes narrowed. He nodded slowly.

"An unusual man who ain't afraid of MacLeisch!" he went on. "An unusual man who'll go ag'in' th' wishes of his boss," he said and his gray eyes began to shine. "But it's unusual men a boss looks for, these days. It's the unusual man who's stuff in him; the man who dares and has grit and gumption."

The official's eyes were brighter. His eyes were dancing! MacLeisch's eyes, *dancing!*

"Sakes!" he said. "Damn!" he said. "With th' rest of them belly-crawlin' for promotion, you do what you like to do and it settles a question that's been in my mind for weeks!

"Stay by the company?" MacLeisch went on, getting red. "I'll say you'll

stay by the company, McCann! And it's this end of the passenger run that'll be open by Ed Noble's quittin' you'll take!" he roared, getting downright purple. "Hear me?" he roared. "Passenger run! Out of Pierre!"

The master mechanic gave them each a long look, then. He stared hard for a speechless moment. Then he turned and walked off before either could get breath to speak.

"Slimmie!" Katy said at last in a whisper, stroking his cheek. "Ah, Slimmie! That's th' best! *That* puts the look in a lad's eye a girl hungers to see. Happy with his maid, happy with his work. But what a man!" she breathed, as she watched the retreating form of MacLeisch.

Slim swallowed drily. "Mac is that way, a man of whims," he said, and drew her close again.

In the Good Old Days

AN old-timer is one who remembers when locomotives changed from crosshead pumps to non-lifting injectors . . . and drawbars had three pockets for the coupling link, because the drawbar was not placed at a standard height from the railhead . . . when all locomotives had channel cocks as well as cylinder cocks—all as large as a city sewer—because the throttle box was in the front end, and the dry-pipe held a million gallons of water, more or less—and oh, boy, when that went up the stack it sprinkled the engine . . .

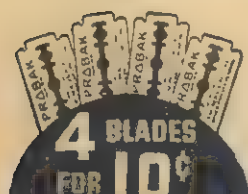
When a bell-cord was fastened to the last air car and went over the non-air cars to the caboose, where it was fastened to a link or pin, so the gang in the crummy would know if the train broke in two . . .

When a switchman, looking for a job, threw a handful of switch keys as his credentials on the desk in front of the trainmaster—just a gesture to show how many roads he had worked for . . . and a well-dressed trainman wore tailored suits with bell-bottomed pants and a Stetson hat . . .

When the lunch-counter girls were built on the Mae West blueprint, and when you asked what kind of pie they had, you would get this answer: "Open face, hunting-case, and the kind you mother used to make" . . .

When a gandy dancer got a dollar a day and free house rent, also coal and coal-oil, and worked ten hours a day; and, believe me, four Irishmen could keep a stretch of track in better condition than a whole swarm of these guys with a white rag around the head. Yes, siree, them was the days!—A. A. Stafford, Carson City, Nevada.

You Risk Being Fooled



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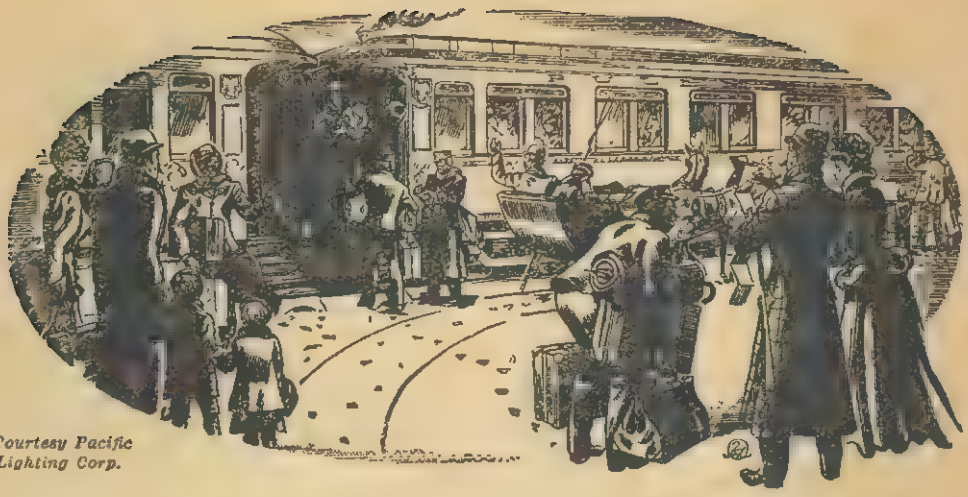


Courtesy Pacific Lighting Corp.

Speed in the Long Ago

By FREDERICK WESTCOTT

Old-Time Boomer Engineer

THE recent installation of fast, light-weight, motor-propelled trains by some of our great railway systems has led many to imagine that high speed is exclusively a product of this day and age.

To learn that speeds of sixty, eighty and even one hundred miles an hour were by no means rare nearly one hundred years ago may be somewhat surprising, but such is the truth nevertheless. Even George Stephenson's *Rocket,* popularly but mistakenly regarded as the first successful locomotive, attained a speed of sixty miles per hour in 1830, after a few alterations, suggested by two years' experience, had been made.

For many years our British cousins far outdid us in the number of trains regularly scheduled at a speed of fifty miles per hour or better, and it is probable that they still excel in the matter of everyday speed, despite our *Zephyrs, Flying Yankees,* and the like. As long ago as 1838, passenger trains, pulled by the eight-foot single-driver locomotives which were standard for many years in England, were scheduled to leave Didcot, 53 miles from Paddington, the London terminal, 57 minutes after leaving Paddington. These trains frequently and repeatedly made the run in 50 minutes, and on many occasions even less. This is regarded as good running even in this streamline age.

The year 1838 was a momentous one in locomotive annals, for it was then that the seven-foot gage Great Western Railway was completed in England. This exceptional gage held many possibilities for the locomotive, which was gradually being improved and perfected. It enabled engines to be built with much larger boilers than had hitherto been considered possible, and the several concerns then building locomotives were not slow in taking advantage of the opportunity offered.

"High speed with stability and safety," was the slogan of the promoters of the seven-foot gage; and the fact that speeds up to 100 miles per hour were reached on many occasions proved the truth of the motto. Of the many designs produced, only one was what could be called freakish. This engine, the *Hurricane,* patented by

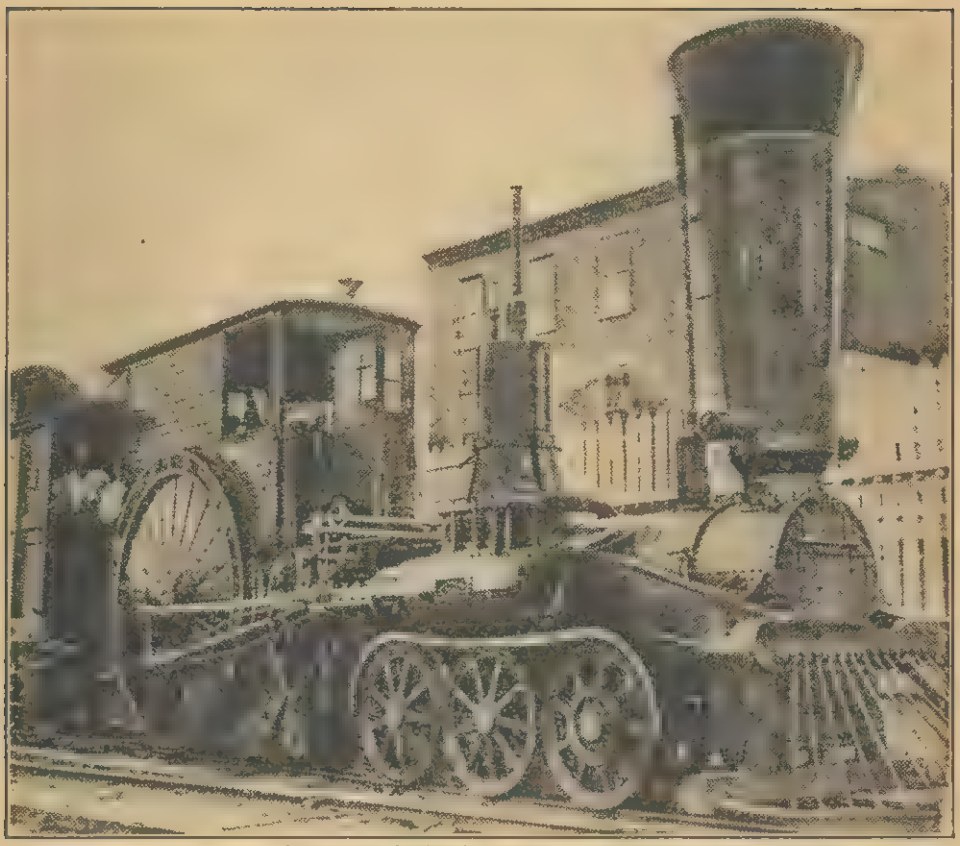


Photo from Frederick Westcott, 26 Morningside Park, Rochester, N. Y.

One of the Seven Crampton Style Engines on the Old Camden & Amboy. This Old Girl, No. 39, Once Averaged Better than 75 Miles an Hour for 50 Miles with a Light Train

T. E. Harrison, Chief Engineer of the South Eastern Railway, had the boiler on a separate carriage from the locomotive proper. The latter weighed eleven tons, had a pair of ten-foot drivers and four carrying wheels.

The design was not practical and had a short life, but that it could run was beyond question. On one occasion the engineer of the queer machine set out to see just what it could do, but before starting he prudently exacted a promise of the directors that they would provide for his family in case he failed to return intact. He actually drove the *Hurricane* at a speed of 100 miles an hour for 28 miles and lived to tell about it. Such a performance is considered worthy of mention today. It is unfortunate that the name of this engineer is unknown, for to be the first to operate a locomotive at such an unprecedented speed called for real nerve.

ONE of the most successful of the designs called forth by the seven-foot gage was the so-called " Bogie Tanks " on the Bristol & Exeter Railway, which was really the western extension of the Great Western. A tank engine, it may be explained, is one which has no tender, the fuel and water being carried on the locomotive itself.

These remarkable engines had two four-wheel trucks or " bogies," with wheels four feet in diameter. The single pair of drivers, which had no flanges, to insure smooth running, was between these trucks, and had the unusual diameter of nine feet. The

upper part of these drivers was not covered with the usual splashers or mudguards, which made them look even larger. They weighed, with coal and water, about 42 tons, somewhat less than the aggregate weight of an ordinary engine and tender of the same power and capacity. The cylinders were 16½ by 24 inches.

The present line of the Great Western between Bristol and Exeter, with its several quite heavy grades, would hardly be thought of as a galloping ground for single driver locomotives; but these exceptional machines made some records with the fast and heavy expresses of their time which were unequaled for many a year. They daily ran at speeds of over 80 miles an hour over portions of the line, and to reach 100 miles was nothing unusual. Such speeds were rarely even approached at that time on any other railroad in the world.

It is probable that the astonishing records they made were largely due to their ability to attain such tremendous momentum on the descending grades, which enabled them to mount the succeeding grade with but little diminution of speed. It would seem that locomotives of this same general design, with boosters applied to both trucks to help in getting under way quickly, would be worthy of experiment in this day of light-weight, high-speed trains.

IN 1847 T. R. Crampton altered one of the long boiler engines on the South Eastern Railway by placing the single pair of drivers behind instead of in front of the firebox. This single alteration was all that was necessary to produce what was long known as a Crampton locomotive.

He had the design patented and worked out his favorite idea with much boldness and success. Many advantages were claimed for the design, among which were greater steadiness in running, increased heating surface, and better supervision of the working parts, which were placed directly under the eye of the engineer.

One of his first engines was the *Namur*, built for a Belgian railway. Before she was delivered she was borrowed by the London & Northwestern for the purpose of testing her in competition with their own engines. The *Namur* tackled all classes of trains. Coal, package freight and fast passenger were all the same to the queer locomotive with the unusual wheel arrangement, and she made an enviable record with all of them—much better than anything the London & Northwestern could bring against her.

The pronounced success of the *Namur* encouraged the London & Northwestern to order two larger engines of the same design from her builders, Bury, Curtis & Kennedy. These were the *London* and *Liverpool*. The latter was much the better of the two, and put up some remarkable performances. She weighed 35 tons in working order, exclusive of tender, and was at that time the largest and heaviest locomotive ever built for passenger traffic. Her drivers were eight feet in diameter, with three pairs of carrying wheels in front of the firebox. Total heating surface was 2260 square feet, and the cylinders were 18 x 24 inches.

She is credited with reaching a speed of 79 miles per hour with a train weighing 150 tons, which was about equal to what the broad gage had to offer. She once hauled a train of 40 coaches weighing over 200 tons. This was considered a remarkable performance, for two of the current type of engines on the London & Northwestern were regularly assigned to such a train.

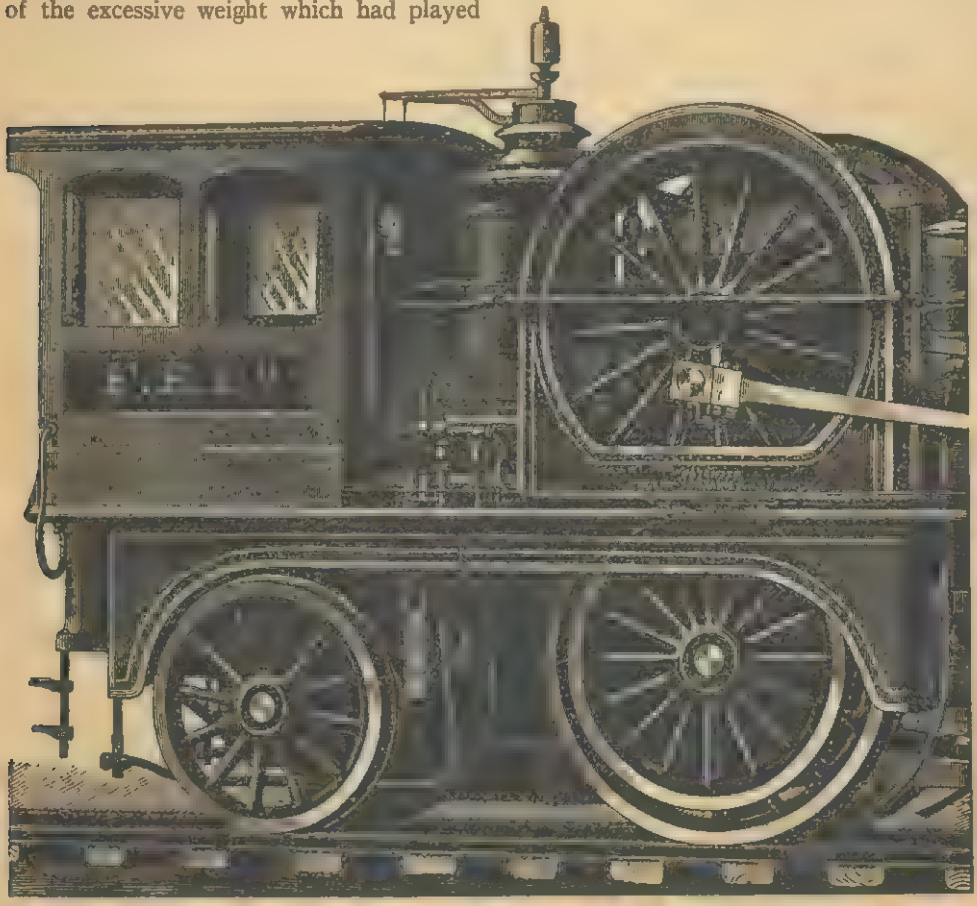
The greatest weight was on the drivers, which of course had much to do with her success; but it was also the reason why no more of her type were ordered for the road. The rails then in use were of light iron, with no couplings or fish-plates of any kind. The great length and concentrated weight of the Cramptons were ruining the line in wholesale fashion; and what the management saved on locomotives, it had to spend on rail renewals. The officials regarded the Cramptons as what was possible rather than expedient in locomotive design, and despite Crampton's efforts, no more of them were used on the road.

THEIR fame, however, had been noised abroad and French engineers built many of the type. John Stevens, president of the Camden & Amboy Railroad, the forerunner of our great Pennsylvania System, rode behind the *Liverpool* while in England and was much impressed with her unusual features. When he returned to the United States he talked the matter over with Isaac Dripps, his master mechanic; and they decided to build some Cramptons for their road.

Stevens had heard of the severe pounding they gave to the track and road bed. In view of the increased curvature of the Camden & Amboy, they thought it best to use a truck in place of the three pairs of carrying wheels of the *Liverpool*. They also decided to place this truck far enough to the rear to relieve the drivers of some of the excessive weight which had played such havoc on the London & Northwestern.

That they succeeded only too well is shown by the fact that the large six-wheel truck which they used carried a weight of 14 tons, while the drivers, which were of wrought iron with the spaces between the spokes filled in with oak planks, carried only a little more than eight tons. Their diameter was the same as those on the *Liverpool:* eight feet.

The cylinders were 13 x 34 inches, and the boilers were only three feet in diameter, formed of plates but 3/16 of an inch thick, with spiral riveted seams. The firebox was made very long, to burn anthracite coal; and the rear of the boiler sloped downward, so as to pass under the driving axle. The fireman stood in a sort of pit, on a level with the ash pan.

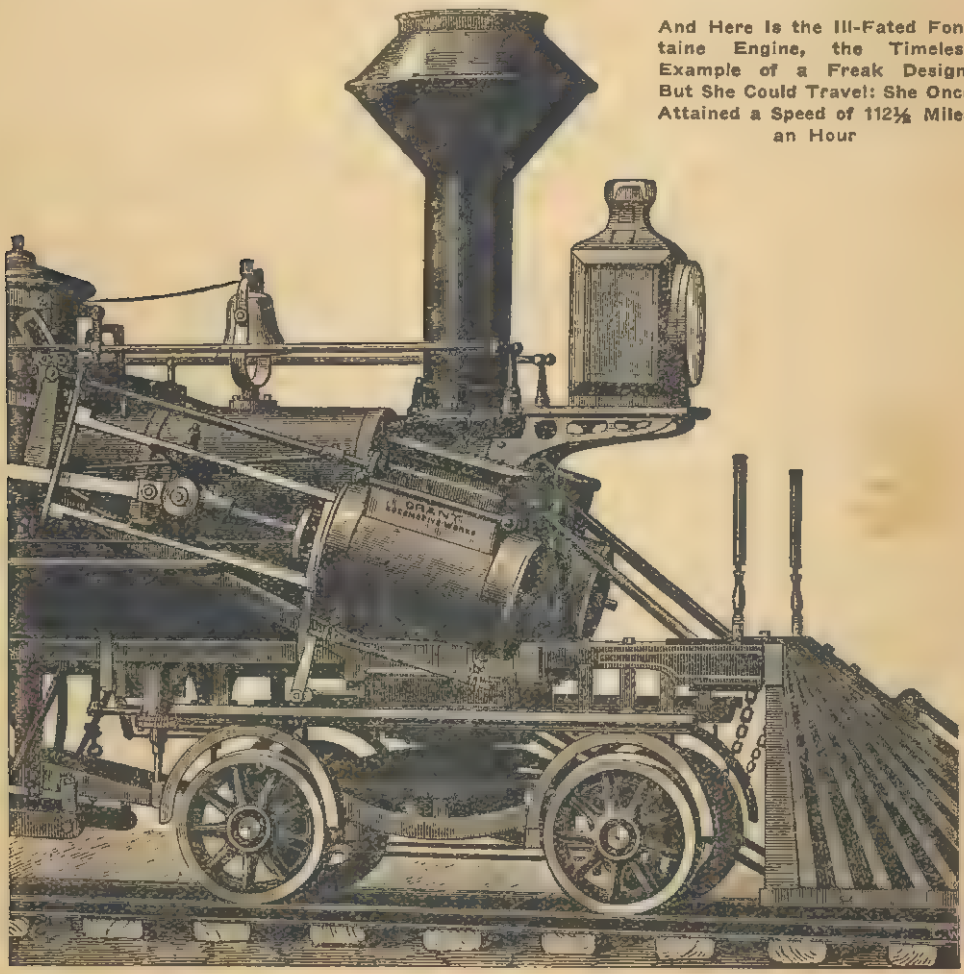


Seven of these ungainly machines were built for the road by Norris Brothers of Philadelphia. The first three were delivered in April, 1849, and the last of the series in April, 1853. Their performance must have been considered satisfactory, since no essential changes were made in the design after nearly three years of experience.

William De Sanno, for some years foreman of the Meadows Shops of the Pennsylvania Lines, fired one of these engines. He said that they were very slippery and slow in getting under way, but that when once they got going with a light train they would run about as fast as one cared to ride. Because of the small weight on the drivers, they were prone to leave the track on the slightest provocation. However, none of them was ever involved in any serious wreck. One of them, No. 39, once made a run of 63 miles in 50 minutes with two light coaches—not a mean achievement for the time.

Yes, there were many fast runs on our railroads before the Civil War—in the days when even steamboat builders were giving more thought to speed than comfort.

Crampton engines were also built by the Baldwin Locomotive Works for the Vermont Central and the Pennsylvania Central, but with smaller drivers. It was found that something more than big drivers with no corresponding increase in boiler capacity



And Here Is the Ill-Fated Fontaine Engine, the Timeless Example of a Freak Design. But She Could Travel: She Once Attained a Speed of 112½ Miles an Hour

Photo from Frederick Westcott

After Fontaine Engine No. 1 (on Preceding Page) Was Rebuilt, She Became No. 16 of the Wheeling & Lake Erie

was needed to produce high speed with a paying load.

AMERICA'S first mile a minute run, however, is said to have occurred in 1848. According to H. L. Peterson, who sent us the information, it was a result of the ambition of Charles Minot, superintendent on the Boston & Maine, who determined to build a locomotive that could average a mile a minute.

An order was placed with the firm of Hinkley & Drury, Boston, for a ten-ton locomotive that was to have only two drivers six feet in diameter. Day after day Mr. Minot watched the progress of the engine with critical eye, deciding on the name *Antelope* in anticipation of its speed. He said that if it wouldn't do a mile a minute he would go back to the shop.

A 26-mile stretch of track between Boston and Lawrence, Mass., was chosen for the trial. Under the eagle eye of the superintendent, all details were carefully arranged. Minot took extra care in selecting his train crew.

He asked of Pemberton, one of his best engineers: "Can you put me in Lawrence in twenty-six minutes? If you won't do it I'll make the run myself."

Every subordinate knew the enterprising superintendent was not only a natural mechanic and thoroughly competent engineer, but also careful about risking human life. Pemberton said he would try to make the time.

The realization of this unheard-of speed required the most careful preparation. Trackmen were sent over the road to spike all switches and inspect the roadbed. All trains were either sidetracked or taken off during the trip, and an engine was sent ahead to see that instructions were faithfully carried out.

News of the *Antelope's* forthcoming trial was noised far and wide. Reporters of the Boston papers were invited to accompany the superintendent, and on the appointed day they, together with a few other guests, were assigned to the single car that was attached to the engine. A large crowd gathered at the station, and amid cheers and waving of hats, Mr. Pemberton pulled open the throttle while Minot at his side waved a parting salute.

Faster and faster went the little engine. As the tiny train sped along there was considerable jolting, for tracks were far from perfect. Despite a certain amount of uncertainty, the reporters and others managed a cheer or two for the intrepid Minot and his helpers. As for Minot, he never lost confidence after the *Antelope* got away to its flying start.

Halfway to Lawrence he looked at his watch.

"Fourteen minutes," he said. "This won't do, Pemberton, we're a minute behind."

The engineer jerked the throttle wider, and the *Antelope* leaped ahead. But not a mishap occurred. Every switch was in

perfect order; not a man had failed in his duty.

When the buildings of Lawrence hove in sight, Minot again looked at his watch with a smile of exultation. As they bore down on the station he kept his watch in his hand, and as Pemberton brought the little train to a standstill his timepiece clocked off just 26 minutes.

FOR nearly 30 years after these early days of high wheels, locomotives in the United States were built with drivers between five and six feet in diameter. With the constantly increasing weight of trains, such engines did very creditable work at speeds which were then considered ample. In the early eighties, however, higher speeds were again attempted, and while the engines with comparatively small drivers stood manfully up to the task, the greater number of revolutions and the much increased velocity of the reciprocating parts told severely on them.

At this time Eugene Fontaine, a descendant of an old and honorable French family of Detroit, Michigan, was running a locomotive on the Grand Trunk Railway. A jovial, likable man with many friends, "Gene" was of an inventive turn of mind, and had produced several very creditable inventions. Among them was a machine for making pins and a continuous rail railway crossing, the latter still widely used.

He gave much thought to the growing demand for increased speed on American railways, and wondered why the principle of the large and small pulley could not be applied to the driving mechanism of the locomotive. Finally he evolved what became known as the Fontaine locomotive, which for many years was credited with the fastest movement on record. Securing the financial aid of several of the officials of the Grand Trunk and the Canada Southern Railways, he had two of these engines built by the Grant Locomotive Works at Paterson, New Jersey, late in 1881.

They were similar in form to the ordinary American or eight-wheel type, but the rear drivers were replaced by a pair of large carrying wheels. Above the boiler was mounted a single pair of six-foot wheels, to which was attached the operating mechanism. These wheels were in contact with a pulley four feet in diameter and cast on the outer face of the remaining pair of drivers. They were pressed tightly together by two levers beneath the boiler, which were actuated by a pair of cylinders to which compressed air could be admitted. With a comparatively slow revolution of the upper wheels, the drivers on the rail rotated at a much higher speed.

These engines made some remarkable records on the Canada Southern between Detroit and Toledo, and between Buffalo and Amherstburg; but they had much the same defect as the Cramptons on the Camden & Amboy. The single pair of drivers made them lacking in adhesion, and consequently they were slow in getting started, but once they had gained their stride with a train they could handle, their speed was limited only by the nerve of the man at the throttle.

Two of the Canada Southern's greatest speed merchants were assigned to these engines—Isaac Deyell to No. 1 and Lorenzo Clapp to No. 2. On one occasion "Ike" Deyell drove No. 1 with two light coaches carrying a party of Canada Southern officials at a speed of a mile in 32 seconds, and the limit had by no means been reached when the passengers signaled to reduce speed.

THE fame of the Fontaine engines traveled far and wide, and the management of the New York Central Railroad arranged for a trial of No. 2, slightly the larger and heavier of the pair, in January, 1882. She made a triumphal run from Buffalo to Albany, attracting attention at every stop. After reaching Albany, and being well groomed, she was coupled to a train made up of a baggage car, three heavy coaches and four still heavier Wagner drawing-room cars. In the rear car was President William H. Vanderbilt with a party of high officials of the road.

This train was several times the weight of anything the Fontaine had as yet tackled, and it proved to be her undoing. With Lorenzo Clapp at the throttle, and Engineer John Hutchinson as pilot, she left Albany 13 minutes late, due to her difficulty in getting the heavy train started. At Schenectady 32 minutes were chalked up against her, 42 at Little Falls, 45 at Utica, and 52 at Rome. She made her inglorious way into Syracuse one hour and eight minutes late.

Two days later, after more tuning up, she made a trip on freight between Syracuse and Buffalo. She was given a train of 20 cars, weighing 356 tons, a lighter train than was regularly hauled by the New York Central engines. But she did no better than on the previous trip, and had to be helped over every hill.

These tests proved conclusively to the New York Central and to the railroad world in general that while the Fontaine locomotives had practically unlimited speed with a light train, they were totally unfitted for hauling a revenue-producing load. After vain attempts to correct their inherent faults, they passed out of the picture and found a last resting place in the Canada Southern roundhouse at Livernois Avenue, Detroit.

After two years' hibernation they were purchased by M. D. Woodford and O. P. Dunbar, general manager and master mechanic, respectively, of the Wheeling & Lake Erie R. R. They were taken to the New York Locomotive Works at Rome, N. Y., and rebuilt as ordinary eight-wheel engines, and for many years thereafter pulled passenger trains on the W. & L. E. They made no miles in 32 seconds, but they did haul a paying load at a speed their new owners regarded as satisfactory —which, after all is said and done, is the mission every locomotive is expected to fulfill.

With the advanced knowledge of locomotive construction and the wonderfully efficient machines which are standard on every modern railroad today, some of these early attempts at high speed appear almost pitiful. Speed they all had, but as revenue producers they fell far short of the ideal, and will be remembered merely as stepping stones toward the speed and luxury we take as a matter of course.

But when we speed through the countryside in one of our new streamlined trains at 90 or 100 miles an hour, we might do well to reflect that perhaps our great-grandparents experienced the same sensation in the long, long ago. No streamlines, no air-conditioning—but speed enough to satisfy the most exacting.

Next Month—Modern Speed: North America's Fastest Runs, Based on the Latest Employees' Timetables

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FIT GEM AND EVER-READY RAZORS

DURING 1892 and 1893 the Katy built its line from Franklin Jct., Mo., to Texas Jct., Mo., and made a trackage agreement with the Burlington to use its line from Texas Jct. to St. Louis so the Katy could gain access to St. Louis. I had been a "lightnin' jerker" on the Katy at various places between Houston, Texas, and Hannibal, Mo., and when the new line was opened I made application for one of the new stations. The little old depot was about 50 yards from a high bluff on the north side. You could see a few farmhouses to the south, one being about a quarter-mile away.

When the westbound passenger train pulled out on my first evening a big husky young fellow—whom I had noticed at the train in the morning driving an omnibus—invited me to ride down to his home at Cedar City, across the river about 1½ miles from North Jefferson. I asked the train dispatcher at Franklin Jct. for "good night," as it was then about 5 P.M., but he said: "You'll have to meet the local freight which should be there about 9.30 P.M." I told him I'd be out a couple hours and return in time to take care of the local. He said, "O. K."

So I informed the young man I'd go to town with him. On the way he told me his parents were running a boarding-house at Cedar City. I decided to live with them. Cedar City was a little old place in the middle of the road, sand about a foot deep all over the town, a couple of general stores, a saloon, a church, school, and the Chicago & Alton depot, it being the end of the Mexico Branch and the passenger crew laid over at Cedar City during the night.

I went to all the business houses, introducing myself as the agent for the new railroad, and asked for their business. Then I signed up at the boarding-house. After a good supper I began to think about the trip back to the depot to meet the local. It looked like a lonesome night walk. When I started to leave, the bus driver offered to take me up in his buggy and remain until the local came. That suited me fine. We returned about 11.30 P.M. He did this for me several times, but it soon became old to him, and I had to hoof it most of the time after that.

In those days the only way to cross the Missouri River was by ferry boat or skiff. By reason of the new track the trains ran late, especially the local freights. I found that meeting the locals was sometimes nearly an all-night job. North Jefferson depot soon became a hangout for the social lights of that vicinity. *(Photo on page 27.)*

Someone suggested a dance in the freight house, so we pulled one off. It met with such favor that about every week we had a big dance there while waiting for the local. There were some of the old-time fiddlers in that neck of the woods. We'd clear out the freight house and set the fiddlers on a box in one corner. How they made those fiddles talk! On several occasions the local ran in while the big dance was on. The train crews came in and took a fling at "All hands around" while they relieved each other unloading freight.

One night they had so much freight that we couldn't put it all in the freight house and continue the dance. We sent a messenger to Jefferson City for a drayman, John Herring, to get the freight so as not to interfere with the dance. He did, but could not get away until daylight.

There was a shoe factory in the penitentiary at Jefferson City, from which we received quite a bit of business for points south. Some of these boxes of shoes were 5 or 6 feet long. One day John came over with a load of shoes for the westbound local. He was unloading them on the platform when I heard him yell. I went out to see what had happened. John said: "This damn box is different from shoes I ever handled. Let's open it."

We did. It contained a man in convict clothes. His pals in the "big house" had pulled him up with a small crowbar on the inside so he could release himself after the box had been loaded in the car. John took the prisoner back to Jefferson City and got a reward.

Where John Herring is today I don't know, but I sure would like to hear from any of the boys and girls who danced in that old freight house in the early Nineties.—J. L. Coss, 406 S. Evans St., Elreno, Okla.

* * *

AS telegraph operator I have worked on 25 different pikes. One was on the old Iron Mt. at Bismarck, Mo., in 1907 when the station was held up. A young man named Caliott fired at the bandits with his .32 and received a bullet in his leg. I had a .32 in my own pocket but decided not to kill any bandits just then, especially when one fellow fired a .45 at me just as I jumped behind the big pot-bellied stove. The bullet hit the stove instead of me. After so much shooting, the bandits decided they didn't care for railroad money and left in a hurry.

Now I am working nights on the Santa Fe. The news butcher always saves me a copy of RAILROAD STORIES. Next month I will send you facts about a hobo and his dog.—R. L. METCALFE, Skull Valley, Ariz.

THREE wrecks, years ago, come to mind. Before daylight June 22, 1903, a terrific crash awakened Spokane, Wash. Eighty cars on the old Spokane Falls & Northern tracks (now Gt.N.), 4 miles north of town and 8,200 feet higher up, loaded with coal and shingle bolts that had been on a siding, ran away when someone released brakes. The cars jumped the tracks, smashed a laundry and several cottages and killed several men, women and children. I saw piles of wreckage 60 ft. high.

A year or so later the same kind of wreck occurred on the old Gt.N. towards Fort Wright. A wooden trestle had burned out. Forty cars ran out of a siding onto the trestle, dropping 250 feet to the Spokane River.

Soon afterward an N.P. train broke in two going up the 9-mile grade from Marshal Jct. The rear part was going 50 m.p.h. when it left the rails with several men on board.—CHAS. NICKON, 323 Stimson Bldg., Los Angeles.

* * *

FOR 2-way communication without cost, I used to chalk notes on water tank, air reservoir, etc., of B.R.&P. cars in Rochester for my buddy in Pittsburgh. He replied in the same way.

Regarding "The Car That Rerailed Itself" (May issue): 15 years ago a Pittsburgh work car dropped to the ties between spread rails. Motorman Russell Wright turned on a few notches. The car went forward a few feet and climbed right back on the rails.—GEO. BEATER, *S.S. Fairfax*, Merchants & Miners Transp. Co., Baltimore, Md.

* * *

ENCLOSED find check for year's subscription to RAILROAD STORIES for S. C. Bush, care of Braden Copper Co., Caletones, Rancagua, Chile, South America, which his sister sent on to me. Bush is an old tropical friend of mine. He is a former locomotive engineer who ran on the old Arizona Eastern, was injured in service, and is now foreman in a copper smelter.

Railroad men like to read true tales more than fiction, but I suppose that younger readers who don't understand the many errors in fiction read it with enjoyment. The other day I was talking with E. A. Wamsley, an old-time boomer like myself. He was kicking about an absurdity in the story, "Pig Iron," by Harold Titus (June issue), which mentions a train of 185 loads of iron ore, 15,000 tons. This, of course, is absurd to any railroad man.—R. H. ("TURKEY") MOORE, 4605 S. Van Ness Ave., Los Angeles, Calif.

(EDITOR'S NOTE: *Is it true there are "many errors" in our fiction? If so, we'd like to know about them. However, we maintain that Moore and Wamsley are mistaken in regard to the Titus story. Trains that heavy are not unknown on ore-carrying roads, as ore is generally hauled down grade to the docks.)*

WHILE I was a lad of 17, Billy Koppa, also 17, and I were operators at Gray's tower on a line the Milwaukee was building from Libertyville, Ill., to Janesville, Wis. The new line crossed the Wisconsin Central at our tower. There were no night trains on the Milwaukee, but continuous tower service was required. At night and most of the day all the towerman had to do was watch for the W.C. trains and line up for their direction.

Billy and I felt there was a lot of waste motion in these reversing movements, and we connected the reversing mechanism so we could line up the W.C. in both directions simultaneously. We were thus able to find out that there were plenty of fish in the lakes round about.

After 2 months of this improved interlocking we saw a stranger parked behind a pile of ties. We decided our interlocking wasn't appreciated, so we placed the safety bars back to normal and awaited developments. Soon we were ordered to report to the signal supt., and like Geo. Washington, we told the truth. After it was all over we met on the stairs. I have not seen Billy since.

I went West for 4 yrs., then returned to Chicago with a wife, no job, no cash. I tried the Milwaukee. The chief was hard and I was blacklisted; but men being scarce, I was placed on probation in a 68-lever "arm-strong" interlocking plant at Rondout, Ill., where the E.J.&E. crosses the Milwaukee. On my second night I overlooked a back-up derail in my combination when an E.J.&E. train stopped to pick up some stock, and I put 3 cars of hogs in the ditch. Those hogs set out to see the world without waiting to see what had happened.

I don't know how the Milwaukee allowed me to work for the following 13 months, but I lived down the bad start and my record shows that I left of my own accord. Now I'm back on the farm, putting in 16 hours a day for the pay I drew as an operator in 1900.—HOWARD J. HIGLEY, Seward, Okla.

* * *

AS an old Adams Express man I worked in the office at Louisville, Ky., when plenty of freight went by express. That was before the days of parcel post. Many a conductor held trains at 10th St. station while we loaded stuff into express cars. I ran extra when regular messengers failed to show up, and handled railway mail.

My wildest ride was from Henderson, Ky., to Louisville behind an extra engineer. Curves meant nothing to him. We cracked the whip all the way up the river, making up 40 minutes in 75 miles.

Lots of beer was shipped. If the messenger knew his business, the crew did not go thirsty. I also worked in La Salle St. station, Chicago, and took care of carloads of horses during the World War. Made one trip, Chicago to Jersey City, with 7 cars of horses in 26 hours.—J. D. COPELAND, 8420 Kenton Ave., Niles Center, Ill.

WHO knows about the washout and wreck between Cedar Falls and Waverly, Ia., on the B.C.R.&N. in May, '99? The coaches took fire and the engineer had to have an arm cut off in order to rescue him. And who can tell about the passenger train that ran into a burning bridge east of Lincoln, Neb., in July, '94?—HARRY ROBINSON, Hines Creek, Alta., Canada.

* * *

AS an old-time boomer I ran on some of the fastest single-track lines in the country, including the I.C. and M.&O. Fast hoggers like Casey Jones, Will Ruffin, John Market, etc., had nothing on Dick Bolin of the M.&O., who could run water tanks some of the others could hardly get to.—GILBERT MCWIRTER, Como, Colo.

* * *

IN the S.P. boneyard at Sacramento, Calif., stand the "mortal remains" of 34 iron horses. A short distance away is all that's left of old 2224—142,350 lbs., built by Cook 40 years ago, price, $10,000. She used to pull the limited over the hump, Sacramento to Wadsworth, Nev. She was a "monarch of the rails" in her time, according to the adv. dept., but is now outclassed by the AC-6, weighing 932,900 lbs. and costing $140,000. Now the 2224 has a job as stationary steam boiler in a minor shop. Her bell was sold to a ranchman to call the hired hands to meals.—OLD-TIMER.

AM I a boomer? I started out as jackhammer man on C.&N.W. construction job at Carterton, Va. As I weighed only 125 lbs., the foreman put me on a steam shovel as fireman. When the job was about finished almost the entire mountain slid down on us. All but the smokestack was covered. It became rather warm before the operator and I were dug out. Both of us escaped without a scratch.

Then I fired on the N.&W., later on the Virginian, ran a dinkey on a 5-mile tram road for a coal company until a fill gave way carrying my train ½ mile down the mountain. I jumped and escaped with a sprained ankle.

Finding mountain railroading too strenuous, I worked my way to Cuba, Panama, Nicaragua, Hawaii, Guam, Philippines, China, Japan, San Francisco and then San Diego, where I have a suburban run on the San Diego Eastern. I want to hear from anyone who ever worked on the N.&W.—ALFRED E. KELLER, 3074 Central Ave., San Diego, Calif.

* * *

HAVE spent the biggest part of my life booming, beginning as gandy dancer, then water supply, telegraph operator, brakeman and signal man. Have been out of a job 5 years. Am now too old to start over again. Dellinger's stuff doesn't mean a thing to me; neither do any of the other fiction writers. But I look forward to Jimmy Earp, true tales and "Light of the Lantern."—J. C. HICKS, Div. 34, O.R.T.; Div 137, Signalmen.

(EDITOR'S NOTE: *Earp is a fiction writer.*)

Photo from J. L. Coss (See His Letter on Page 25)

The Old M-K-T Depot at North Jefferson, Mo., As It Looked in the Early Nineties

Commuter

By
TOM McCLARY

In Which a Peculiar Species of the Human Race Takes Himself for a Ride

IT was three minutes to eight A.M. The peppery little John Nason arrived on the train platform at Maherstown and glanced down the tracks just as he did at precisely three minutes to eight five days each week.

At eight o'clock the spring wind began to chill him. He shivered with a look of annoyance. He was cold because he contrived to wear his expensive tailored coat so that it rode his back like a jockey rides a horse. There was a regular flue between his neck and the coat.

At two minutes past eight the first of his brother commuters arrived.

"'Mornin', John. Better get inside the waiting-room out of this wind!"

"Grrmph!" growled the peppery little man as he pushed open the door. "Smells like a stale bar-room in here. Railroad ought to do something about these waiting-rooms. Regular pest houses!"

At six minutes past eight the train pulled up to the station. It would wait there for six minutes. This was the starting point. Mr. Nason took the first step of the smoking-car and paused to glare at the long space between ground and step. He then had a pitched battle with the smoking-car door which refused to open until he turned the handle completely. Then it flew open.

"Like to break a man's neck," mumbled Mr. Nason and walked to his regular seat, leaving the door open behind him. The door stood open for four minutes until another commuter came in and closed it.

"Chilly morning," the man nodded.

"Danged cars ought to be heated better," Mr. Nason barked. "Dirty, drafty, cold. All they do is hold you up for commutation and then let the customers go to the devil, these railroads."

"That's right," the man said amiably.

"Look at this window!" commanded Mr. Nason. "Hasn't been washed in a week. And it runs smack between two seats."

Conductor Sloane came down the aisle. He was a pleasant-faced man with iron-gray hair and a sandy mustache. Had been in train service more than thirty years.

"Good morning, Mr. Nason," he greeted. "Seat all right this morning?"

"It ought to be, after all this time," the passenger snapped. "Two weeks with a broken spring!" It had actually been four days.

The ticket-puncher smiled patiently and moved on down the aisle. Mr. Nason lit an evil-smelling cigar and opened his paper, knocking off the hat of the man in front. The latter turned around to stare.

"Sorry," said Mr. Nason without sounding it. "No room between these seats. Might as well haul people in a cattle car."

The train sped through the local station of Fleetwood and made the long turn which put the sun glaring through Mr. Nason's window. Just as he did every clear morning, he glanced up at the sun with increasing annoyance four times. Then he banged down his paper and reached for the curtain with a savage jerk.

The curtain buckled but did not come down. Mr. Nason arose and tugged savagely.

The man in front picked up his hat a second time and looked around. "You have to push those two jiggers together beside pulling down," he offered.

"Well, you shouldn't have to," said the peppery little man. "No consideration of the customer!"

He gave a wild jerk. The curtain came down with a file-like screech. He sat back, grumbling and nursing knuckles not yet recovered from his previous scrape with this curtain.

An ample-girthed real-estate woman who was getting off at the local station flicked the back of Mr. Nason's hat in passing out.

"By thunder!" he rasped. "That's the last straw! And me a stockholder of the railroad!"

He sucked so deeply upon his cigar that he got to choking. This started his eyes running and they kept running all the way into town. This called his attention to the lack of ventilation. Damn it, a person could catch colds in that car, could catch anything—maybe become consumptive.

As soon as Mr. Nason reached his office he sat down and dictated four vitriolic letters on railroad service, one to the city newspaper, one to the railroad, one to the Maherstown weekly, and one to the state railroad commission. It was high time the railroads were made to give service and lower commutation rates!

SUPERINTENDENT MACNEAL looked up with lined brow as Conductor Sloane came into the office.

"Sit down, Sloane. Know a regular commuter from Maherstown named John Nason?"

The old conductor grinned. "Know him? Sure, I do. He's the chief liability of the eight-twelve local five days a week!"

MacNeal nodded understandingly.

"Important citizen?"

"Worth a half million, they say. But always grouching about something. He'd find trouble with the gates of heaven. What's he tooting about now?"

Like most superintendents, MacNeal had come up from the ranks and he knew men. There was a twinkle in the official's eyes when he replied:

"Everything in particular. But chiefly that the blinds never work, there's no ventilation, the cars are too hot or too cold, somebody knocked his head in getting out, and the sun gets in his eyes."

"It's been getting in his eyes every morning for seven years but he won't change his seat," the conductor explained. "You see, he takes the same seat every day."

"I know the type," MacNeal said wearily. "Anyhow, he's been raising so much hell that the commission is making a special investigation and every paper out that way is yelling for fare reduction and better service. Our commutation rates are already less than bus rates, as you know, while our running time is only two thirds of bus time. But we'll fix him once and for all."

"There's a murder law in this state," Sloane reminded his superintendent.

"This won't be murder," MacNeal sighed. "Those new air-conditioned special carriage, two-deck cars are ready at the price we can afford to pay. You're getting a new smoker."

EXACTLY three weeks and ten public letters later, John Nason arrived at the Maherstown station late for the first time in his life. His derelict auto, vintage of 1927, had finally given up the ghost and he had had to walk. There was a bare five minutes before the train left.

Mr. Nason saw first the knot of excited chattering commuters and then the strange back car. The sight left him gaping. It was gleaming rustless steel, streamlined. It had two sets of windows, one above the other, and an individual window for each seat. When he started to get aboard he tripped. There was an automatically unfolding step which did away with the old long step. He hadn't noticed it.

As he prepared for his morning skirmish with the door, it opened so easily that he nearly went flat in the aisle. It closed behind him automatically. There was a little incline to the lower deck seats, and the same to the upper. That being more trouble to walk, Mr. Nason took the upper deck.

When he sat down he had an entire window for his vision and all the leg room he could need if he were a giant. There was a seat facing him, instead of facing the same way he was sitting. A person getting out of the seat behind would have to lean over and reach to touch his hat. There were ash trays, which Mr. Nason was the first *not* to use. The car was warm, but not hot. As the peppery little man lit his stinking cigar, the smoke and most of the deadly fumes were taken off mysteriously.

Around the turn past Fleetwood, Mr. Nason greeted the sun with his customary morning glares. They were a little more fiercely joyful this morning. He would have laid odds, if he had been a betting man, that at least

the shades on the new smoking-car were as balky as the old ones. He gave his customary reach and tug.

The shade rolled down with that smooth roll of a vault door. Mr. Nason was utterly and completely stupefied. There was absolutely nothing wrong with this new car. He felt no satisfaction in this. It aroused his venom.

Then he noticed that the shade was of a new type of steel alloy still in somewhat experimental stage. Its dull sheen shimmered through his mind all the way in to town.

"Just like the railroads. Not even sure that curtain will last long enough yet," he grumbled.

Arriving at his office, the peppery commuter sat long in meditation. Finally he sat up and squared his shoulders with a motion which made his perfectly fitting coat hunch back like a suit bought at a hock shop. With an air of important righteousness, he rang for his secretary.

"Miss Knapp, take a letter to the newspaper. It's about the new type of cars the railroad is putting on."

"Oh, aren't they grand?" the girl enthused.

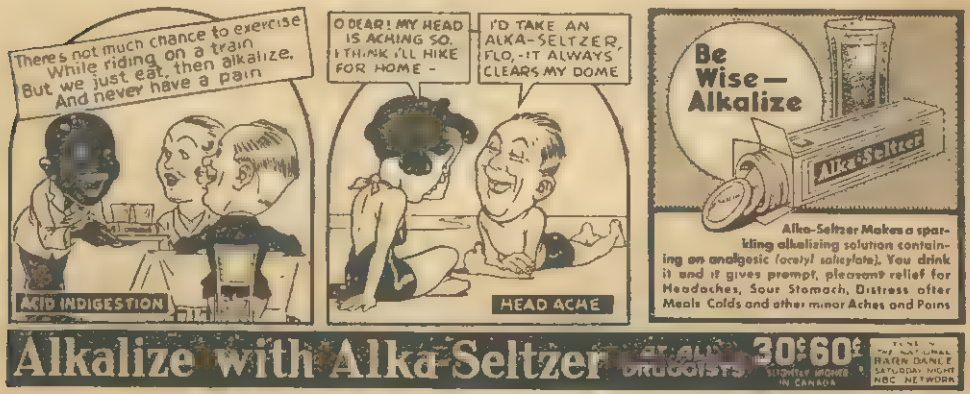
Mr. John Nason looked severe. "In these times it is a profligate waste of stockholders' money. It is the usual railroad disregard of the rights of citizens, stockholders and commuters. The old cars would last ten years longer. They were perfectly satisfactory. Now then, to the editor—"

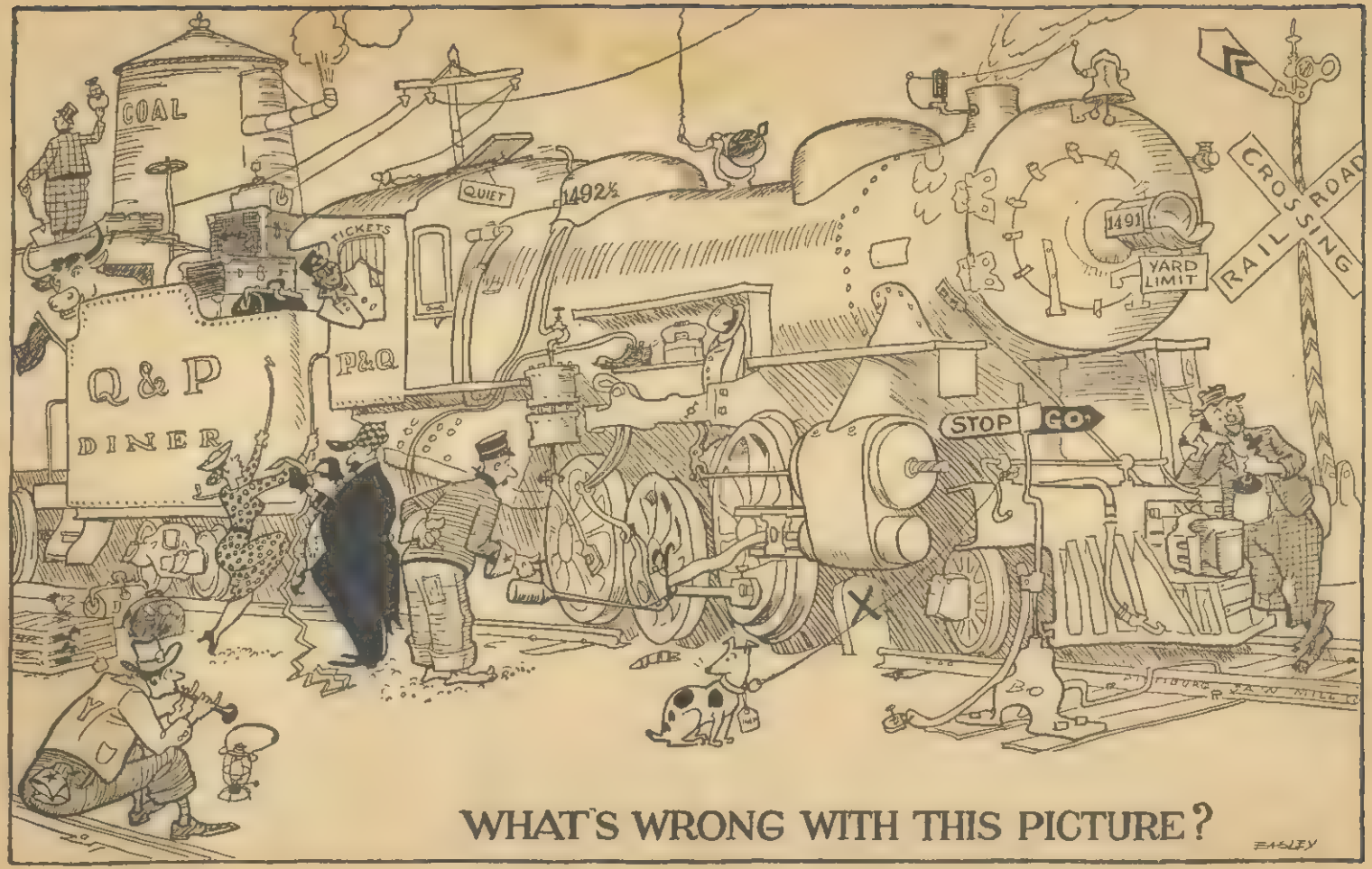
Why the Big Teams Travel by Rail

WHY the big league baseball teams prefer the railroads to other modes of transportation was explained recently by William Harridge, president of the American League, in discussing reasons for not bringing into the league cities farther apart than those at present in them.

It was suggested that airplanes might be used for the longer trips. The first objection was that in the event of a crash an entire ball team might be wiped out. The second was that storms and fogs disrupt airplane service, and playing schedules cannot suffer many such disturbances. And as for busses—well, everybody knows they can't possibly compete with iron horses in speed and safety!

"We have been fortunate in our use of the railroads," said Mr. Harridge. "Not once, to the best of my memory, has a ballplayer been hurt in a railroad accident. Moreover, we have never missed a scheduled game because of a railroad delay, and very often trains will be held fifteen and twenty minutes for us. We would be foolish, therefore—to say nothing of being ungrateful—if we were to switch."


There's not much chance to exercise
While riding on a train
But we just eat, then alkalize,
And never have a pain
ACID INDIGESTION
O DEAR! MY HEAD IS ACHING SO. I THINK I'LL HIKE FOR HOME -
I'D TAKE AN ALKA-SELTZER, FLO, - IT ALWAYS CLEARS MY DOME
HEAD ACHE
Be Wise— Alkalize
Alka-Seltzer
Alka-Seltzer Makes a sparkling alkalizing solution containing an analgesic (acetyl salicylate). You drink it and it gives prompt, pleasant relief for Headaches, Sour Stomach, Distress after Meals Colds and other minor Aches and Pains
Alkalize with Alka Seltzer
AT ALL DRUGGISTS
30¢ 60¢
SLIGHTLY HIGHER IN CANADA
TUNE IN
MARTIN DANIEL
SATURDAY NIGHT
NBC NETWORK



WHAT'S WRONG WITH THIS PICTURE?

The Sunny Side of the Track

BEWARE OF STATION AGENTS

THE Northern Pacific, according to a story told by E. V. Smalley, historian, issued an order in 1884 that all agents and employees must appear in uniform. A tailor was sent over the line to take measurements and turn out the suits.

In order to cover the entire line between St. Paul and Portland quickly, the tailor traveled on the trans-continental train and wired ahead to all agents: "Take off everything but your pants and shirt and be on the platform when train arrives to be measured for uniform."

With tape measure, pencil and paper in hand, the tailor sprang from the train at one of the new stations, to be confronted by a comely young woman. With her was her brother, a husky six-footer.

"She's the agent here," the brother announced. "What do you mean by sending such a telegram to a woman?"

The tailor immediately reboarded the train and sent this telegram to the St. Paul general office:

"How many agents have you got that don't wear shirt and pants and where are they located? Answer quick."—The North Coaster, N. P. Ry.

* * *

AN "UN-FARE" ADVANTAGE

A SCOTCHMAN had been boring everyone in the "Royal Scot" dressing rooms with tales of the great deeds he had done.

"Well, now," said an Englishman at last, "suppose you tell us something you can't do, and, by Jove, I'll undertake to do it myself."

"Thank ye," replied the Scot. "I canna pay ma railroad fare."—Canadian National Rys. Magazine.

* * *

THE SMOKE MENACE

PASSENGER (smoking a cigarette): "I say, driver, what's the average life of a locomotive?"

Religious Engineer: "About 30 years."

Passenger: "I should think such a tough-looking thing would last longer than that."

Religious Engineer: "Well, perhaps it would, if it didn't smoke so much."—G. R. Driggers, McKenney, Va.

LIGHTS OUT!

A SHORT time ago when an I.T.R.R. interurban car entered Springfield station, the trolley came off the wire, leaving the car in total darkness. One of the passengers, who was sitting behind a boy and girl, emitted a loud "smack" with his lips. When the car light came back on forty pairs of eyes were turned on the blushing couple, who didn't even know each other.—Hulin Cross, 206 Sherwood Ave., Peoria, Ill.

* * *

RAILS PAY BUS FARE

MISSOURI PACIFIC employees at Arkansas City, Kans., were "taken for a ride" the other day. They quickly collected $4 for a woman who said she needed that amount to visit her sick grandmother at Bagnell, Mo.

"Thank you ever so much," she said, as they handed her the collection. "I shall go right down to the bus terminal and find out when the next bus leaves for Bagnell."—C. Groff, 201 E. Summit St., Kent, Ohio.

* * *

A TACTFUL CON

A CONDUCTOR on D.&H., Susquehanna Division, Train 305, had an agitated lady as passenger. She requested that he warn her just before they reached a certain tunnel, as she always became sick while passing through one. Naturally, it required quite a bit of tact to tell her that she probably would not suffer on that trip, as the tunnel had been passed several minutes before.—D.&H. Bulletin.

* * *

CONSCIENCE HAUNTED HIM

IN 1895, H. A. Turner of Riverside, Calif., stole a ride on a "Katy" freight out of Parsons, Kan. Forty years later, Station Agent Lester Strawn received a $1 check with the following note:

"Enclosed find check for $1 in payment for riding an M-K-T freight train in 1895 from Parsons, Kan., west to the Labette Creek water tank, 8 miles. I am a Christian and according to God's word I am required to make all wrongs right as far as possible to do so. Please accept this check with best wishes and prayers for all concerned."—W. D. Sherman, Rusk, Texas.

Clearing Up the Long Island Railroad Wreck near Berlin, N. Y., on the Tragic Morning of August 27th, 1893; Drawn by a New York Herald Staff Artist. This Was a Rear-End Collision, a Replica of Which Is Sculptured in a Brooklyn Graveyard over the Tombs of Two of the Victims, Mr. and Mrs. Oscar Dietzel

Sculptured on a Tombstone

By E. B. HEINEMAN
Author of "A Race That Cost 44 Lives," etc.

THERE are many strange tombstones and curious epitaphs in graveyards all over the world, but the only train wreck sculptured over a grave is said to be the one adorning lot number 28583 in Greenwood Cemetery, Brooklyn, New York City.

It is true that an old Catholic church in Lourdes, France, contains a plaque showing a head-on collision of two trains carrying pilgrims to the Lourdes shrine nearly a hundred years ago. It is true also that occasional bas reliefs of locomotives are to be found on tombstones of engineers in old English churchyards and elsewhere.

Moreover, there is a sculptured model of the old Western & Atlantic engine *General* which figured in the Andrews railroad raid of 1862, on a monument erected by survivors of the raid in the National Cemetery at Chattanooga, Tennessee, not far from the scene of the famous raid.

L.I.R.R. Disaster Carved in Marble on the Dietzel Monument in Greenwood Cemetery. Behind the Engine and Tender Are Strewn the Derailed Passenger Coaches. Another View Is Shown on Page 38. Both Photos by Melville Langhans, 421 91st Street, Brooklyn, N. Y.

But the wreck monument in Greenwood Cemetery stands in a class by itself, and back of it is an interesting bit of history. Ask the old-timers who worked in or near New York City forty-two years ago. Ask them about the head-on collision of two heavily laden passenger trains on the old Manhattan Beach Division of the Long Island Railroad which occurred on the night of August 26th, 1893, near the little village of Berlin, Long Island.

You look in vain today for Berlin on

modern maps; it is now part of metropolitan New York. And the Manhattan Beach Division has lost its identity in the great maze of New York's present-day subway-elevated system of transportation.

But back in the "Gay 'Nineties" the Manhattan Beach line played an important part in city life, carrying throngs of people from the congested East Side tenements as well as from the brownstone mansions in desirable residential districts to the seashore on sweltering hot days of summer. Many excursionists carried along their own bathing-suits—and what stuffy uncomfortable garb it was, compared with the slim lines and scanty cut of the modern one-piece beach attire!

Among the passengers on a homeward-bound excursion that night were the former Miss Maggie Diehl, young wife of Oscar B. Dietzel. They lived at 112 East 114th Street, New York. Maggie was a pretty girl, with long, wavy, flaxen hair. Her husband was a partner in Dietzel & Grossenbach, braid manufacturers.

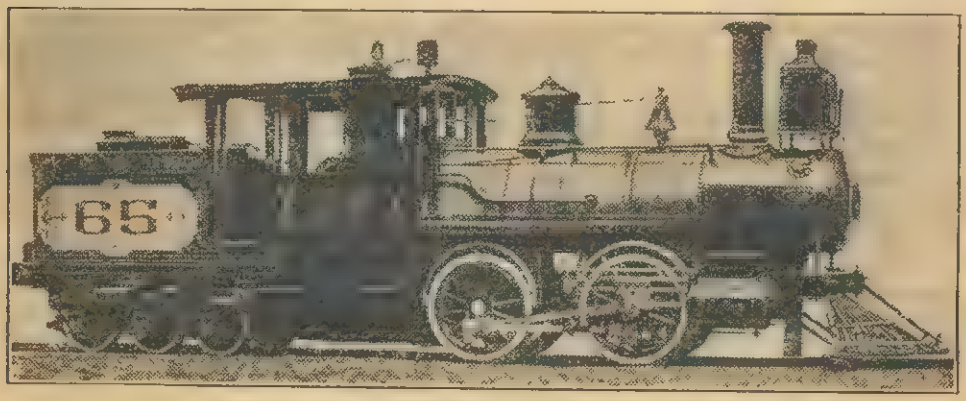
Like most of the riders on that crowded train, Maggie and Oscar were tired, happy and sunburned after a day of frolic at Manhattan Beach. Maggie was dressed in a gossamer black chiffon that set off her beautiful light hair to its best advantage. On her finger was a plain gold band wedding ring inscribed, "O. D. to M. D., 26th of May, 1892." It was that ring by which her mangled body was identified several hours later.

THE accident occurred about two and a half miles from Long Island City, at a narrow road which ran down a grassy slope and crossed the railroad at grade. On one side of the track there was a rocky, uneven bank about five feet in height.

That section was protected by two semaphores in the block signal system. Even so, it was regarded as a dangerous stretch, on account of the double curve of the paralleling east and westbound tracks. It was a dark foggy night. The Manhattan Beach engineer, Donaldson, on westbound track, rounded a curve on an up grade and found himself blocked by a red light. This light was controlled by Robert J. Nott, the signalman in a hillside tower three hundred yards to the west.

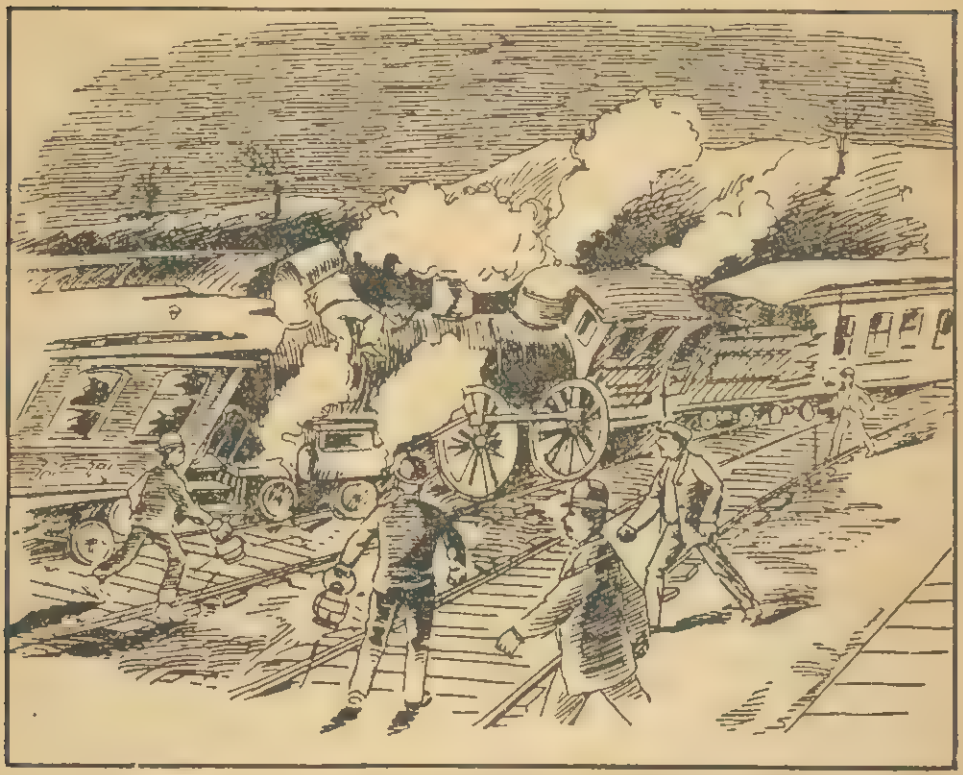
The engineer stopped abruptly. He did not know there was a Rockaway Beach train in the block just ahead. He could not see her through the murk. Neither could Maggie and Oscar Dietzel see her, as they, with other passengers, peered out the windows in an effort to learn what caused the sudden stop.

In the tower, Nott got a signal from the block to the west of him to let the Rockaway train proceed. This he did, at the



From Collection of Joseph Lavelle, 4615 66th St., Woodside, Long Island, N. Y.

One of the Engines in Service on the L.I.R.R. at the Time of the Berlin Disaster; Built by Rogers in 1883, with 14x18-Inch Cylinders and 48-Inch Drivers. On the Tender Was Painted the Words "New York & Manhattan Beach." Her Number, 65, Was Changed to 231 in October, 1898



The Berlin Wreck of August 26th, 1893; Sketched by an Eye-Witness for the New York Times

same time changing from red to white the light controlling the Manhattan Beach train. (In those days *white* was the clear signal.) Then he signaled "clear block" to the operator east of him.

The Manhattan Beach engineer proceeded, but was slow in getting under way. Being a heavy train, she almost stalled on the steep grade. This slow start caused the tragedy.

Traffic on the beach lines was heavy. The Manhattan was not only closely following the Rockaway but was closely followed herself by another Rockaway Beach train. The tower man, apparently not noticing that the Manhattan was barely crawling uphill, gave the clear signal. This was a terrible blunder on the part of Robert Nott, and he was held responsible for it later. Nott was a former sailor, twenty-three years old, with only a few months' railroad experience.

Just outside the tracks at that point was Haberman's agateware factory, facing the center of a double curve of the tracks. Before reaching that point trains from Long Island City came around a sweeping curve. Then along a short stretch of straight track up to the hillside tower. Beyond was the big curve, around which roared the Rockaway flyer on a headlong mission of death.

The Rockaway was a regular train of five passenger cars which had left the beach at 11 P.M. The Manhattan, with six cars, running extra for the benefit of persons attending a concert given by Sousa's Band that evening at Manhattan Beach. She had left the beach terminal at 11.10 P.M. This was a little late because she was following the regular train, delayed nearly twenty minutes. The lateness, together with the slow start up the grade at the agate factory, resulted in calamity.

It was 11.42 when the Manhattan train thundered around the curve toward the semaphore. Red burned behind the signal glass, and the Manhattan engineer came to a full stop beside the agate factory. He

Dietzel Monument. (Arrow Indicates Wreck)

was held up for a few minutes on this block because the regular train was waiting only a short distance ahead.

Red turned to white, but the Manhattan had not picked up full speed when the Rockaway swept around the curve behind. Whistles shrieked for a second, followed by the loud reports of cracking wood as the Rockaway engine buried herself in the rear car of the Manhattan train, crushing and mangling the helpless passengers. Screams and groans could be heard above the horrendous snapping of timber and twisting of steel.

Engineer Frank Cronkite, of the Rockaway train, and his fireman, Robert F. Pierce, jumped in time to escape unhurt.

Just as the crash came, the coupling pin between the fourth and fifth coaches of the Rockaway parted. Two cars slid backward down hill toward Long Island City, into the fog which hung low and heavy over the dark night. The runaways caused no additional damage. But the havoc wrought by the locomotive was tragic enough.

The rear coach on the Manhattan Beach train was telescoped and broken in two, while the car just ahead was shoved into a ditch and turned on her side. It was a dismal scene. There were very few houses in the vicinity, but Hugh O'Neil, watchman at the agate factory, opened the doors of that establishment for use as a temporary hospital and helped the survivors to release those pinioned in the wreckage.

THE Rockaway Beach engine was a shapeless, distorted monster of bent and broken iron and steel. One driving wheel was wrenched off. Axles were bent into a semicircle. The tail end of the boiler was broken through, and the empty cylinder crammed with spikes and jagged timbers from the car into which it had crashed.

But the shattered red cars and the demolished engine were nothing as compared with the loss of human life. One could scarcely walk near the tracks without stumbling across the body of a victim who was dead, dying or badly hurt. Long

rows of wounded were propped up against a wall to await the relief train.

When the grim casualty list was at last completed, there were found to be fifteen dead, including Oscar Dietzel and his wife; and seventeen persons seriously injured.

The Dietzels were buried in Greenwood Cemetery, Brooklyn, in plot number 28583. Over the grave was erected a beautiful monument in deathless granite, depicting the train wreck in which the Dietzels and thirteen other persons died.

A Secret Kept for Forty-Two Years

TWO fast passenger trains met head-on late at night between stations, but nobody was hurt, no damage was done, and no employee was laid off as a result. Who ever heard of it? Probably nobody, aside from the two crews directly involved.

It occurred 42 years ago, when I was a railway mail clerk on the Rock Island, with a run between Davenport, Iowa, and Leavenworth, Kansas. One night we left Davenport on No. 11, westbound, about 20 minutes late. As our time was pretty fast in those days, we could not make up anything, so when we got down toward our meeting-point for the return train, No. 12, we naturally wanted to know where they were, and the report was "on time."

This would advance the meeting-point at least one station. Between our meeting-point, Perlee, where there was no night office, and our last stop before meeting, was only one station, Pleasant Plain. We asked the operator at our last stop, Brighton, how No. 12 was. He reported them on time. This left us only one thing to do—meet them at Pleasant Plain.

Pleasant Plain was not a stop for us. We went by as if we had been on time. Right then work stopped in our mail car. Both clerks prepared to unload. We opened the doors on both sides, each of us leaning out and hanging onto the catcher bars, ready to jump. We passed the last curve, and as we straightened out, No. 12's headlight showed up. Still we kept on working steam, and you may be sure there were two badly scared postal clerks. Then we heard No. 12 calling to us, and our engineer jammed on the emergency.

When the two trains finally stopped they were within 20 feet of each other. It wasn't long until there was a full-sized "cussing match" in full blast out there between those headlights. The outcome was that we, being late, backed up to Pleasant Plain and No. 12 went on her way.

We fully expected that somebody would be laid off or let out, but both crews continued at work and nobody ever mentioned it, so far as I know. What caused the slip, whether a "crossed order" or our crew forgot, we never knew. Men don't like to do much talking under such circumstances.—C. N. Crotsenburg, 245 Main St., El Cajon 1321, Calif.

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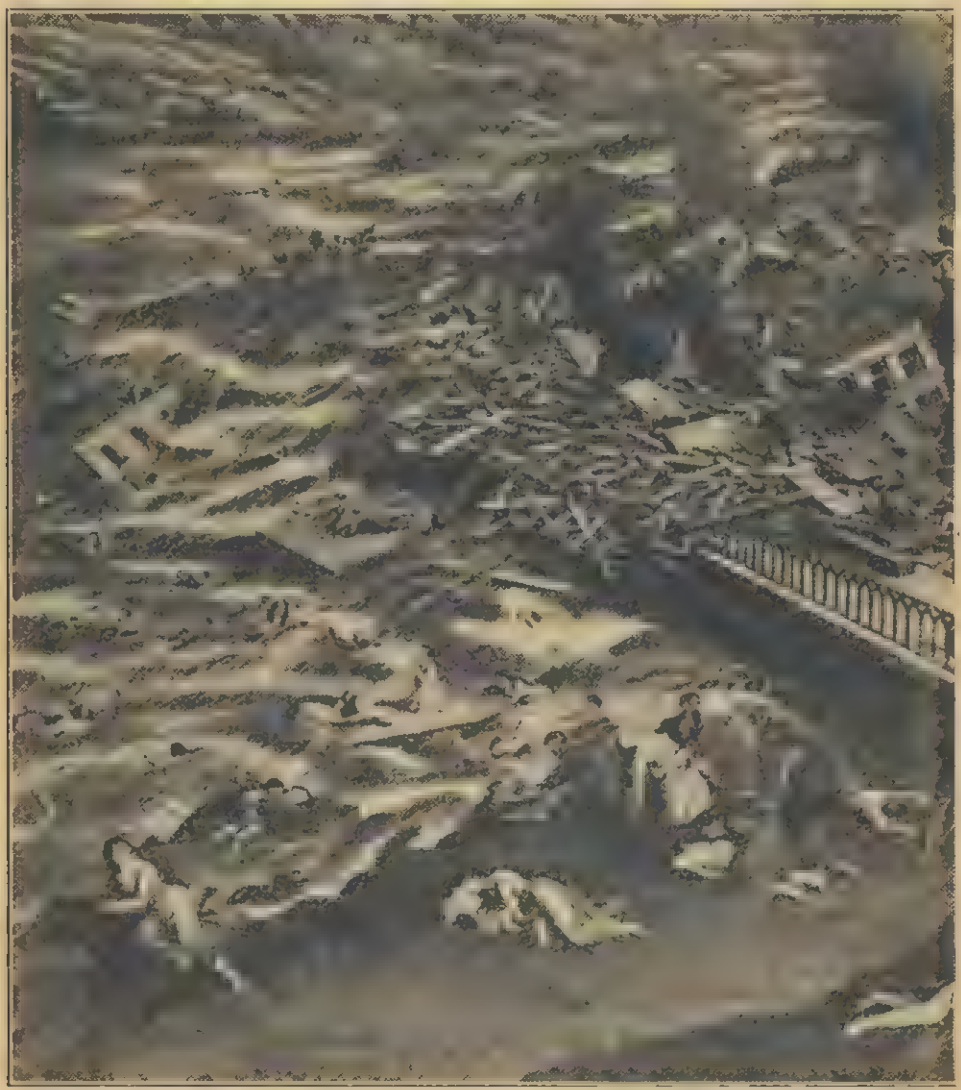
TRUE TALES *of the* RAILS

Actual Happenings Told by Eye Witnesses



The Johnstown Flood of 1889. Scene at P.R.R. Bridge, Where the Loss of Life Was Heaviest.

WHEN a man looks back over the years he can usually fix upon one incident that stands out above all others. You might call it his biggest thrill. At any rate, the big moment of my life came on May 31, 1889, in connection with the flood at Johnstown, Pa.

At that time I was a regular engineer on the Mt. Pleasant Branch of

The Great Johnstown Flood

By MART RIDENOUR

This Old Print Was Drawn from Actual Photos and Descriptions Given by Eye Witnesses

the Baltimore & Ohio Railroad. I had just pulled the accommodation into Connellsville, Pa., with engine No. 10, finishing the second round trip of my run and ending my day's work, and was getting off the engine to go home when the operator came running out of the telegraph office yelling at me:

"The Conemaugh dam has busted! There's a terrible flood! Johnstown's

wiped out! We're sending a relief train, and yours is the first engine available."

"My God! When did this happen?" was all I could say.

"Three o'clock this afternoon," replied the operator. "You're going to run like hell to Johnstown — dispatcher's orders."

Later I learned the details. Conemaugh Lake was two and a half miles long, a mile and a half wide and 100 feet deep. It held a larger volume of water than any other reservoir in America. Many years ago this lake had been a feeder of the now abandoned Pennsylvania Canal. The Pennsylvania Railroad had purchased the franchise and property of the canal and had sold Conemaugh Lake to the South Fork Hunting & Fishing Club, of Pittsburgh. This club used it as a summer vacation resort.

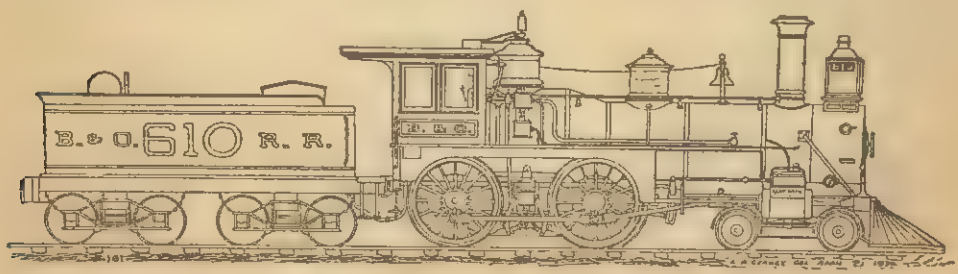
Conemaugh River, which was normally a pleasant little stream no deeper than your knees in the middle, meandered through a valley in the Alleghany Mountains. The Pennsy main line roughly paralleled it for nearly twenty-five miles. Where the Pennsy bridge crossed this river at Johnstown occurred the most appalling flood in the history of our country.

Conemaugh Lake was northeast of Johnstown, about 275 feet above the city level. The river flowed through the city. Before going under the bridge, at the northwest, it was swollen by the waters of Stony Creek which entered the city from the south and roughly paralleled the B. & O. branch line terminating at Johnstown. Fortunately, the B. & O. station was located several miles southeast of the ill-fated Pennsy bridge.

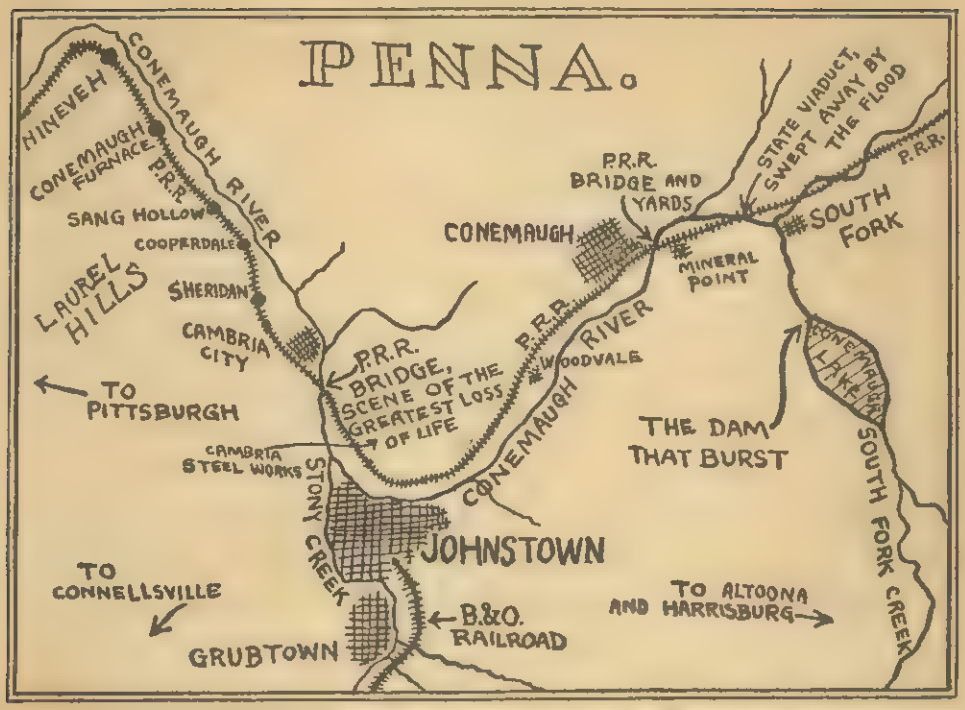
The Conemaugh dam was nearly 1,000 feet long, 110 feet high and 90 feet thick at the base. The top, 25 feet wide, was used as a driveway. You might think from these dimensions that the dam was massive and impregnable, but in reality it had been a growing menace to the valley for more than ten years on account of the weakness of its construction.

Despite the tremendous volume of water which this dam had to restrain, it was built entirely of earth, only the slopes being riprapped. It should have been solid masonry. Again and again protests had been made to the sports club which owned this property; but the club, wealthy though it was, did not care to spend the huge sum required to rebuild the dam in the interest of public safety. However, it did make the gesture of having the dam "inspected" once a month, and the inspection report was always favorable.

There had been several scares in various flood seasons, but until the spring of 1889 most of the inhabitants



Mart Ridenour's Engine, Built in July, 1872, by Danforth Locomotive & Mach Co., Paterson, N. J., with 17x24-Inch Cylinders and 64-Inch Drivers. There Were Five Engines of This Class, G-5: Nos. 610 to 614 Inclusive. (Drawn by C. B. Chaney, Brooklyn, N. Y.)



Map of the Conemaugh Valley as It Looked in 1889, the Year of the Big Flood

of Conemaugh Valley were reassured by the optimistic reports of engineers hired by the South Fork Hunting & Fishing Club.

TORRENTIAL rains poured down upon the valley in the last two or three days of May, 1889, swelling the Conemaugh River and Stony Creek. The city of Johnstown was badly flooded several hours before the dam broke. Water in the city was about three feet deep, and rowboats were being navigated through the streets.

Meanwhile, up at the Conemaugh Lake two engineers were supervising work on the dam. The water level was rising with terrible rapidity, and an attempt was made to ease the pressure on the ill-constructed dam by opening a sluiceway. Hourly the situation was becoming more critical.

At intervals during the morning messengers on horseback were sent down to warn the people in the valley that the dam was likely to break at any moment and urging them to take to the hills as soon as possible.

Yes, there were plenty of warnings, just like the story told in the Bible about the big flood in the days of Noah; but few people had sense enough to get out of danger while the getting was good.

That's one phase of the situation I never could understand. Water deep in the streets, boats being used, water rising everywhere, and a red flag, so to speak, waved across the main; yet all but a few hundred men, women and children ignored the warning.

Why, with the hours of advance notice they received, every soul could have gotten out of that valley and into the highlands, with many of their valuables, before the dam gave way.

The unprecedented loss of life could easily have been averted—*if folks had only listened to the warnings.*

At 3 P.M. the great dam broke. The break was 300 feet wide! One hour later America's largest reservoir was empty. With a thunderous roar that could be heard for many miles the tremendous volume of water rushed down the valley at two and a half miles a minute, hurling trees, rocks and houses into the air and accumulating a vast pile of débris on its lightning-fast journey.

One by one the towns in its path were swept away. It took but a flash to demolish the Pennsylvania Railroad yards at East Conemaugh, with about thirty-two engines and cars. Locomotives weighing twenty tons apiece were buried deep by the downward thrust of the boiling water or else were carried along on its surface like eggshells. One of the locomotives was borne along for a mile; she was found later on the Johnstown flat.

On, on swept the huge wall of water, nearly forty feet high and half a mile wide! On its raging bosom were thousands of tons of wreckage—railroad equipment, houses, livestock, household goods; yes, and a great many human beings, living and dead. From Conemaugh Lake to Johnstown, more than eighteen miles, the wall of water rolled in about seven minutes!

Straight against the Pennsylvania Railroad bridge at Johnstown this liquid mountain flung its burden, piling up an immense mass of débris. Unlike the Conemaugh dam, the P. R. R. bridge was strongly constructed of stone masonry. It resisted the violent impact, forming a ghastly dam of its own, with wreckage clogging its arches and heaped ten feet above the level of the railroad tracks.

To make the situation even more appalling, hundreds of miles of barbed wire, picked up by the roaring river from the Gautier Mills, were forcibly wound around the débris by the strength of the current; and on top of all that, the mass caught fire. Well, the fire burned for twelve hours; and it seemed that whoever had escaped drowning was either pounded to death by the flotsam or else perished in the fire there at the Pennsy bridge. The total death list, as nearly as we could figure out, was nearly 2,300 men, women and children.

JUST about the time the fire started, I was getting ready for a record-breaking dash from Connellsville to Johnstown by way of Rockwood—a distance of 88.4 miles by rail—with two coaches full of doctors, nurses and first-aid supplies.

I rushed into the beanery for a sandwich and a cup of coffee, which I downed in incredibly short time, and hurried back to my engine, No. 10, with my mouth full of sandwich. The conductor came running out of the telegraph office with the train orders in one hand, and gave them to me.

"Gosh!" said my fireboy, after we had read them. "You're gonna need steam in a few minutes."

He grabbed the coal scoop and started bailing coal into the firebox. Meanwhile, the two coaches had been loaded and the last doctor was scrambling aboard, when the trainmaster came alongside the engine and said:

"Mart, old boy, give her all she'll take! A lot of lives depend upon you getting there as soon as possible."

"I know it," I said. "I'm all set. Let's go!"

I tried the air, and after getting a highball I looked to see that switches

were set for the main track. Then I gave two short blasts on the whistle, pulled the throttle gently at first, and upon clearing the spur, I opened her up until it rested against the peg and stayed there. I knew that every other train on the line was ordered into the clear to give us a clear track, so I gave her full rein.

The old 610 trembled and shook all over from the vibration of her drivers, while her cylinders seemed about to burst. The fireboy was right about us needing steam. As I looked out of the gangway at the smokestack I saw she was belching fire and I wondered if the tallowpot could keep her hot all the way.

Any of you who have run over the B. & O. around the Youghiogheny River know how it winds in and out of the Alleghany Mountains as it follows the river 45 miles to Rockwood, which is the junction of the Johnstown branch.*

In those days the ties were most all tamped down with cinders instead of the stone which is used today. It was a dangerous piece of track, especially in the spring, when ice and snow were melting.

Slow orders had been issued to all trains in both directions to be on the lookout for landslides and washouts which had been occurring every spring.

I knew all of these bad spots and I was hanging out the cab window as far as I dared, watching the track ahead. I was aware of the slow orders at these bad places, but I realized also that, as the trainmaster had said, a lot of lives depended upon getting there as soon as possible. Just how serious the flood toll really was, I did not know until later.

Trackwalkers had reported that in several places there were large cracks in the mountain side, and a landslide was to be expected at any time. Therefore patrols were stationed at the worst spots, and oncoming trains were signaled if the track was clear. As we neared these places I would whistle for signals; and upon receiving the high-ball I would answer with two short blasts of the whistle.

ON and on we traveled, never slowing down except on real sharp curves, when I would use just enough air to keep her from turning over. When we reached Rockwood we found that the operator had all the switches lined up for the branch. I whistled for the block and saw it turn green. Then I slowed down a little while crossing the intersection. The operator passed up a flimsy on his hoop to the fireboy. The order said:

You have running rights over all trains. Proceed to Johnstown without delay.

In those days the Johnstown branch was a pain in the neck to many of the crews who worked on it. It was, in fact, just one curve after another, with a rather stiff grade to boot. We took these curves so fast with the old 610 that, the doctors said later, the coaches on rounding the curves seemed to leave the rails on the inside of the turns; and several of the nurses were jolted onto the floor. I had timed the speed of the 610 so that she barely stayed on the rails.

The strain was beginning to tell on the old gal. Her right side-rod, which had been pounding slightly at first, was now getting louder at every turn of the wheels. I kept praying it would hold until we reached the flood scene. After that I did not care what happened. At

** Today the Johnstown branch is used for freight only.*

least, that's how I felt at the time, although I was fond of the old 610; she and I had been places together. She was my iron sweetheart. I had no wife; I was boarding then with our yardmaster, J. C. Burkholder.

As we rushed along we saw increasing signs of the flood, but the damage to the little coal towns on the road to Johnstown was not nearly so great as in the city itself. However, I could see that houses had been washed off their foundations, and some smaller buildings were being carried down the valley. In some places the débris was strewn close to the tracks, making it necessary for me to slow down.

Trackmen were already on the spot and had cleared up the right-of-way, but as we sped onward we could see more and more damage, and there were searchers evidently hunting for the bodies of relatives or friends. At length we reached Johnstown itself. The scenes that met my eyes would beggar description. Suffice it to say that we were among the first rescuers to arrive, and the doctors and nurses plunged into the job without delay.

My fireboy was in a lather of sweat. He was wiping his face with a bandana and leaning against the side of the cab. The old 610 was smoking from every journal box and her siderods were in bad shape, although, thank God, they had brought us to Johnstown.

To the fireboy I said: "Son, I guess she is ready for the hospital."

So she was. The old 610 was taken to the shops and given a complete overhauling. I was as tickled as a kid with a new toy when they gave her back to me in good condition five months later.

Doctor of Ailing Locomotives

By CHARLES F. CARTER

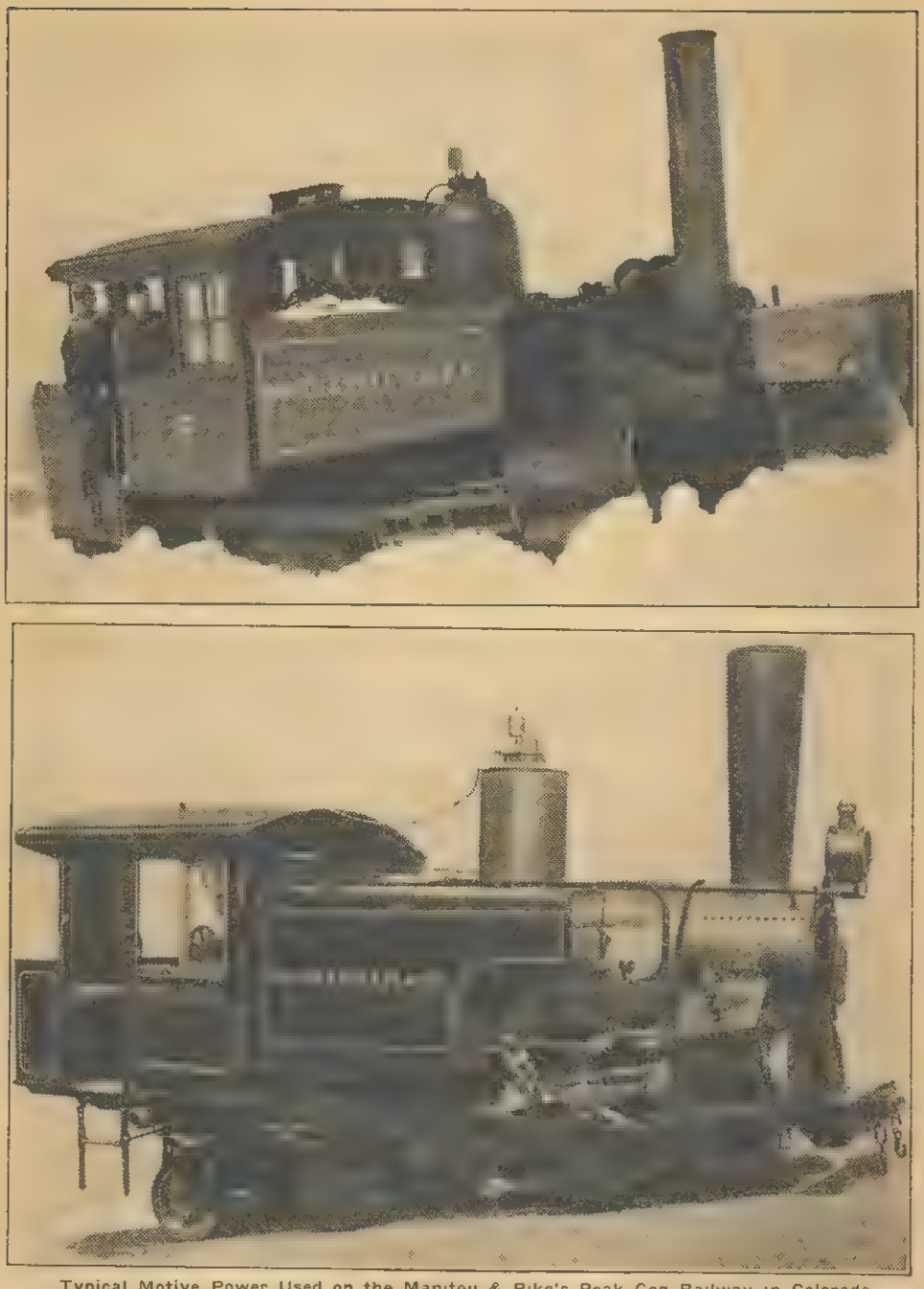
"YOUR locomotives are worthless. We won't pay for them."

In substance, this was what a letter from the president of the Manitou & Pike's Peak Railway told the president of the Baldwin Locomotive Works one summer day in 1891. It told a lot more in language which need not be repeated here; for manufacturers are sensitive about the reputation of their products.

The Baldwin Locomotive works had been building engines for sixty years. They were still bragging about their 6,000th engine, completed the year before. To be told, therefore, that they had not yet learned how to do a good job was a bit raw. To be told that three locomotives would not be paid for hurt still more.

Locomotives for rack railways, or cog roads, to use the more popular term, are costly to build, for they have to be designed for such highly specialized service as climbing 25 per cent grades on a mountain more than 14,000 feet high. On level ground they look as if they were trying to stand on their heads. For trunk line service they would be as worthless as the president of the Manitou & Pike's Peak Railway had alleged them to be, so there could be no question of taking them back, touching them up with fresh paint and working them off on another customer.

As the result of a conference it was decided to send Samuel M. Vauclain out to



Typical Motive Power Used on the Manitou & Pike's Peak Cog Railway in Colorado

Colorado at once to see what the trouble was, remedy it and, especially, to collect the cash for three locomotives. In fact, he was told not to return without it.

In addition to being general superintendent of the Baldwin Locomotive Works, S. M. Vauclain was an inventor of improvements to locomotives, with 100 patents to

his credit, and collector of bad accounts. When he had nothing special to do he galloped around the country as chief trouble-shooter, doctoring ailing locomotives.

For another thing, Vauclain enjoyed telling a good story. I know; for he spun some good ones for me when I was in search of copy some two years after he had been elected president of Baldwin's.

Samuel M. Vauclain, the Doctor of Ailing Locomotives

Vauclain took the next train for Chicago; and after a nice ride of 36 hours more on a dirt ballasted prairie road he arrived at Manitou, Colorado. A few minutes later, with the superintendent of motive power of the M. & P. P. Ry., he was looking over those worthless locomotives. All were out of service with some parts missing and others broken.

"Your damned old scrap heaps are made from second hand materials," announced the superintendent of motive power.

Vauclain's answer was to pull off his coat and jump for the traducer of his engines, who got out of the way. Vauclain was six feet, three inches tall and weighed 250 pounds.

"Get me the injector you have taken off that engine and be quick about it," he demanded.

"It was a second hand injector and I threw it away," said the superintendent of motive power.

"Get it!"

The superintendent of motive power pawed around in the ditch until he had retrieved the injector, wiped the mud off it with a bunch of waste, and proffered it to Vauclain, who ordered him to connect it up in its proper place.

"Try it," ordered Vauclain.

Nothing happened.

"Didn't I tell you? That injector was picked up in a junk shop," crowed the superintendent of motive power.

"Try that top gage cock," ordered Vauclain.

It showed water.

"Open the blow-off cock," continued the representative from Baldwin's.

"I won't do it. It'll bust the boiler," was the answer.

"Do as I tell you!" exclaimed Vauclain, rolling up his sleeves and stepping toward the super.

When the blow-off cock had been opened and the boiler had been drained until only steam showed from the top gage cock, the injector passed water into the boiler just as any good injector should.

Turning to the president of the M. & P. P. Ry., who had been a witness of the proceedings, Vauclain explained:

"No injector will put water into a boiler which is already so full that it is running out over the top of the smokestack. Another thing that can't be done is to allow a bone-headed superintendent of motive power to ruin my locomotives."

"Now what shall I do for an engineer?" asked the president.

"Not a thing until I have finished what I came to do," was the answer. "I'm going to operate these engines on your road satisfactorily and get a check for them before I leave."

"You'll have a nice long stay in Colorado."

"Oh, not so long as you think."

AS there was nothing the matter with those locomotives except the lack of horse sense in running them, Vauclain soon had the three performing like trained seals. One after another climbed to the summit of Pike's Peak, a boulder-strewn area of 90 acres 14,109 feet above sea level. Of the 8.9 miles of main line of the M. & P.

A Crew of Snow-Fighters Clearing the Iron Trail up to Pike's Peak on the M. & P. P.

P. Ry., 2 miles was on a grade of 25 per cent—the longest stretch of that grade in the world. The average was 16.3 per cent.

Curves were limited to 16 degrees. The forty-pound rails were laid in chairs held by heavy bolts to the ties which were bolted every 200 to 400 feet, according to grade, to transverse sections of masonry. There wasn't a foot of trestle on the road and only 4 short bridges, steel girders on masonry abutments.

The locomotives, weighing 32 tons, used three driving pinions meshing into double rack, or cog, rails, 1¼ inches thick, placed 1½ inches apart, the teeth in one opposite to spaces in the other.

It was possible to drive the locomotives 17 miles an hour, but the maximum speed allowed was eight miles an hour, the average four miles an hour. Three hours were allowed for a round trip, including the wait at the summit for tourists to have a good look at the United States.

Descending the mountain was easy. There was no trouble switching to run around the car, for that was kept above the

engine going both ways. All you had to do was to put her in back motion until she got started, then throw the lever in forward motion and let her drift so the steam cylinders worked as air brakes.

When all three locomotives had passed their examinations with perfect scores and were lined up in a class at the Manitou terminus, just above Iron Springs in Engelman Canyon, Vauclain hired three men in their early twenties as engineers and three still younger men as firemen. They soon realized that the mountain climbing locomotives were as safe as elevators.

Everything being in perfect order, Vauclain called on the president of the M. & P. P. Ry., and presented a bill for $70,000.

"These locomotives may operate all right going up the mountain but they're dangerous coming down," protested the president.

"You'll ride with me tomorrow morning," replied Vauclain, "and I'll prove to you that there is no danger."

After long argument the president recklessly agreed to risk his life on his own road. One of the young engineers, a husky cuss who looked as if he might be a fair match for the general superintendent of the Baldwin Locomotive Works, had been carefully coached for the rôle he was to play. Instead of keeping a sharp lookout ahead as good engineers do, he devoted his exclusive attention to the president, reciting an eloquent and continuous monologue on the magnificent scenery.

As usually happens when men do not mind their business the engineer forgot what he was doing and where he was going. He stopped, reversed and after opening the cylinder cocks, gave the throttle a yank. That locomotive started for Manitou as if it was falling down a well.

The president yelled bloody murder; but, guarded as he was, he could not unload, though it is only fair to say that he did his best to do so. The engineer missed only a few adjectives in his monologue on beautiful Colorado before he had stopped the procession and had resumed the climb.

The third time that blundering engineer started for the bottom too soon the president was almost beyond utterance; but he did manage to promise:

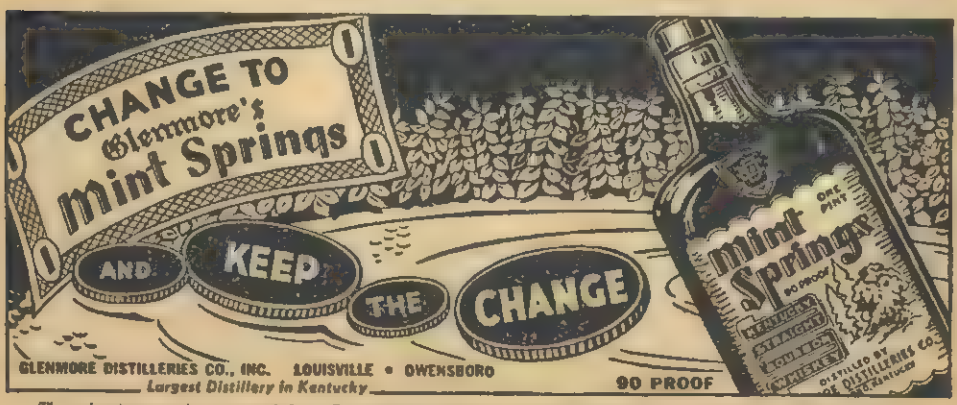
"If you get me back to Manitou alive I'll give you a check for all three of your damned locomotives."

On this assurance, backed by a wink from Vauclain, the engineer woke up and managed to make the home run without any more temporary aberrations of mind.

But next morning, after his ruffled nerves had become soothed, the president forgot all about the promised check.

"Very well. I shall lock up my locomotives," said Vauclain.

That threat brought the check. Those worthless locomotives have carried many thousands of tourists to the summit of Pike's Peak since then and even earned dividends for the owners. In 1913, in fact, the M. & P. P. Ry. paid something like 40 per cent. In recent years it has been earning handsome, but diminishing, deficits.



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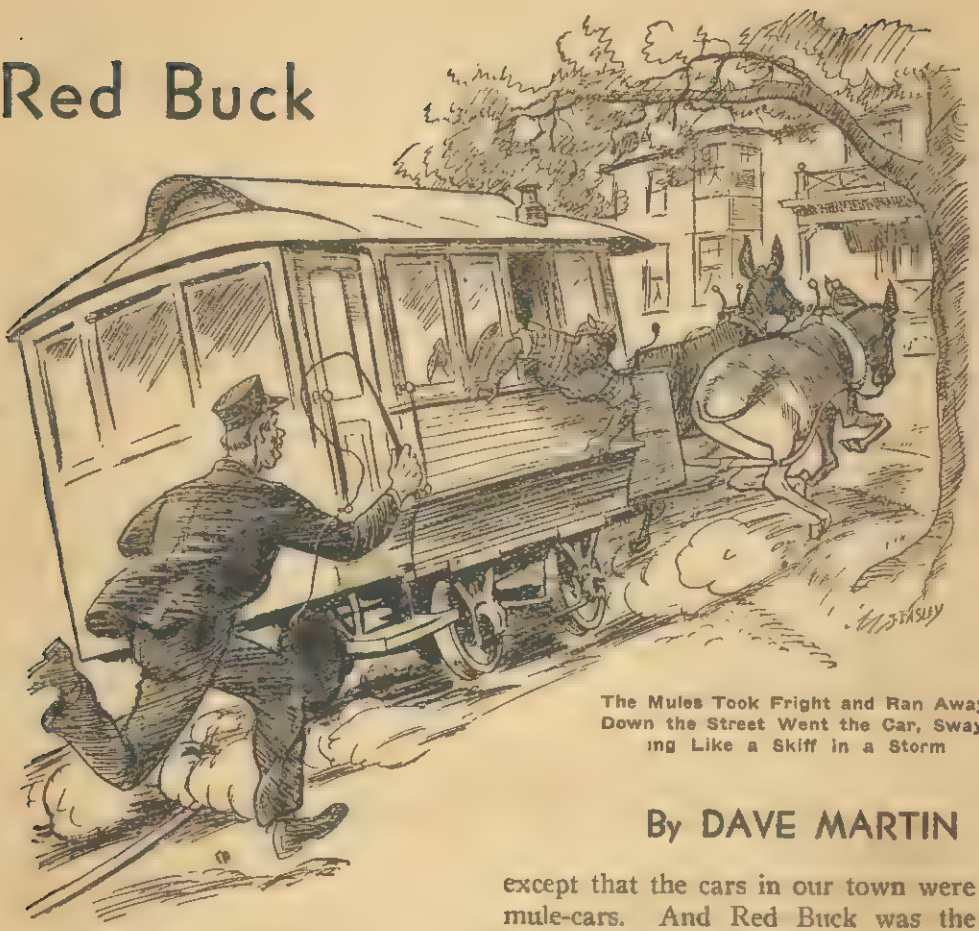
Red Buck



The Mules Took Fright and Ran Away. Down the Street Went the Car, Swaying Like a Skiff in a Storm

By DAVE MARTIN

RED BUCK. That was the nickname we kids hung on him in a Midwest town over forty years ago. If he had another name, we didn't know it. The one we gave him made sense, so it stuck. At the time he was an overgrown lunk of a kid with a shock of red hair that loomed up like a signal flare in a fog. When he smiled, which was pretty much all the time, he showed a row of buck teeth almost as big as billiard balls.

The first time I ever saw Red Buck was away back in the horse-car days—except that the cars in our town were mule-cars. And Red Buck was the big shot on the front end of one of those ancient land-scows.

Having faded into memory, they are worth a word of description. They had four wheels. Two interior seats ran lengthwise, and about twenty adults could squeeze into them. A single sliding door and step at the back served as entrance and exit. Another door in front led out onto the driver's platform, which was enclosed by a waist-high, half-round strip of sheet iron. Here stood the driver, tooling his fiery chargers from one end of the line to the other with the aid of a black-snake whip and a choice assortment of artistic profanity.

There was something deep, dark, and mysterious about the rapid transit mules which whisked the old-time street cars over the traction lines at the dizzy speed of three or four miles an hour—something beyond the ken of human understanding in their inner workings, which made them reject the idea of moving faster than a walk.

If a mule only had horse-sense he would have realized that the faster he made his round trip, the sooner he would be back in the barn eating hay and oats again. But, judged from his gait, the mule didn't figure that way.

Sunshine or storm, snow or sleet, the drivers of the old-time mule-cars stood out on the front platforms, like the Roman charioteers, and took it. When blizzards blew, they wrapped gunnysacks about their frost-bitten feet, stuck numb hands in heavy mittens, pulled a Scotch cap down over tingling ears, and let Jack Frost weave icicles in their whiskers. Cluttered up like this, they had to drive a cantankerous team, wield a bull whip, twist the hand-brake, make change for passengers, fight us ride-stealing kids off the rear step, and cuss. Outside of these few things the job was a cinch.

One of these street car lines ran from the neighborhood where we kids lived to the school we attended when we weren't playing hookey. The distance was over a mile, and the fare was five cents, but show me a kid with a nickel and a hole in every pocket, who has the willingness to squander it on a street car ride if he did have it! With that temptation constantly before us, our gang solved the transportation problem by hooking onto the rear steps of the street cars as they crawled up and down the thoroughfares.

For safety against the attacks of irate drivers we would hastily wire the rear door closed. The angry mule-skinner might be right on the other side trying his best to tear the door out of its frame, but as long as that wire held we never worried.

IT was on one of these free excursions that we happened to meet Red for the first time. We were scuffing out our shoe soles on the way to school. Down the street, and going our way, came one of the bob-tailed cars with a strange driver on the front platform. Wonder of wonders, he actually had those mules at a gallop.

We were less than a second making up our minds. As the car sailed past, though, it took our best legging to land on the rear step. The first thing we did was wire the door closed. Only one passenger was in the car—a very fat colored lady with a big bundle of laundry on her lap.

Just when it looked like a cinch for a free ride to school, the cyclone sideswiped us.

Without slowing the car, the new driver had climbed over the rail of the front platform onto the ground. Then he had waited for the rear part to overtake him. When it did, he got busy with his bull whip. Half a dozen amazed kids dived off that step like so many frightened frogs, and all he got was about one swipe apiece at us. All *we* got was one look at the red hair and buck teeth.

But while Red Buck was working on us, things began to happen to that car. With no driver to urge them, the mules began to slow down. As they did, the sheet-iron fender on the front platform banged into their hind legs. This started them kicking. Then they took fright and ran away. Down the street went the car, swaying like a skiff in a storm.

After the runaway outfit went Red Buck. The colored lady was hanging half out an open window, screaming for somebody to save her, and I don't think she cared a bit who it was. Heads began popping out of houses. Half a hundred people were pursuing the careening car. Talk about fun! We kids were in our glory.

Half a mile from the spot where the runaway started, the street swerved slightly to the left. Right at this turn was one of the fine homes of the city. Here the car jumped the track. When the crowd caught up with it, the car was in the middle of this yard, the mules were having a free lunch on the grass, and the colored lady was wedged fast, half in and half out of the open window.

But from that time on we kids didn't take the street cars as they came. We picked them. And we were always sure we didn't pick Red Buck's.

As the world moved on, eventually the dinky mule-cars were consigned to the cemetery of all worn-out equipment, and the trolley cars replaced them. The first motor car in our town driven over the newly-completed line made a test run about sunset one summer evening in 1888, and the entire city turned out to see this sight.

Five windows on each side was the length of it, with open platforms both front and rear, and one four-wheeled truck underneath. Today it would look like the Toonerville trolley. But to that appreciative generation it was a marvel. And right on its front platform, working the control lever and hand-brake, big as life, was Red Buck.

As a young man I rode those trolleys many times behind Red Buck. Often late at night I would catch an owl car with the big fellow on the front end. His idea of rapid transit was always to push the control lever right around to the very last notch, and let her ramble. I confess I enjoyed it, too—especially on the open summer cars, where I could sit on the front seat just behind the motorman.

THEN, as humans will, Red Buck drifted out of my life, and out of my mind. And long after, in the spring of 1898, I was shuttling between St. Paul and Minneapolis. One night I chanced to get on the last car leaving St. Paul. As I sat in my seat, I remember the thought occurred to me that this car looked like it might work up a real gait if it had some wild rambler like my old acquaintance Red Buck on the front platform.

An old gentleman and his wife were the only other passengers on the car. The starter gave us the signal to pull out. A half mile from the starting point the car stopped in the middle of a block and the motorman began tinkering with the controls.

For twenty minutes that car stalled while the motorman tickled her with various tools. Then all of a sudden, she came to life and got over her tantrums. We started with a rush, and kept piling on the speed. Before we got out of St. Paul she was doing some real running.

All the way into the Minneapolis terminal the high speed never slackened. Long before we reached the end of the line the conductor, the old man and his wife and myself, had all made up our minds that a crazy man was at the controls of the car. But the wild motorman brought that big car to a stop as easy as a bird lights on the bough of a tree. Then he took the control lever off the car, walked over to the starter, and handed it to him with this brief speech:

"I've been on this run for three years, and all this time I've been crazy as a pet coon to know how darned fast this hack would run. Tonight I found out. Now I'm done. Tomorrow morning I'm enlisting for service in the Spanish war."

Something in that grin I'd seen made me follow the big fellow down the street. I tapped him on a broad shoulder. As he turned, I began: "Beg pardon, but I think I know you. Indianapolis! Remember the old mule-car runaway on North Illinois Street?"

The old grin at once got to work. Good-naturedly he grabbed a double-fistful of my coat lapels. "Yes, and I know you, too. You're one of them little scalawags that used to swipe rides on my street car!"

We kept jabbering and walking down the street. Then we found seats in a beer hall—the old Milwaukee on Washington Avenue. There we reminisced and swapped small talk until the sun came up. Red Buck confessed to me there had been nothing wrong with the car in St. Paul the night before. He had simply stalled through the twenty minutes to make sure he would have a clear track ahead.

And since the old nights of the flying owl-car runs in Indianapolis Red Buck had accumulated a wife and three little boys. But this fact did not weigh against his going to war.

SOME men never live the speed bugs out of their systems. That is why I like to ride the late night cars. Then the tracks are not cluttered up with traffic, and trains held up with orders. Maybe they don't run any faster, but to me they seem to. That was the reason I boarded the North Shore Electric late one night in 1928 for a trip from Milwaukee to Chicago.

In the smoking section, in the forward end of this big car, was a deep, upholstered seat, vacant. It gave a fine view of the track ahead. For the entire ride I could imagine I was the tallowpot, and keep an eagle eye on the track.

A door finally slammed over in the curtained cubbyhole. Without a sound the train began to slide down the track. Through lanes of green signal lamps we slipped. Over switches we clicked with little more than a whisper. And all this time we were picking up speed. Every once in a while I felt a new surge of it that seemed to take my body but leave my head behind.

Racine, Kenosha, Waukegan, Evanston were behind us. We swallowed up a long incline, raced up into the air, and suddenly found ourselves skimming along the tracks of the Chicago "L." Like a small kid I stuck to the train until it came to a stop at the final stop in the Windy City. It had been easily one of the finest rides of my life. I collided with the juice artist as he oozed out of his cubbyhole. Right off the reel I started in on him.

"If it's a fair question, brother, how fast were we hitting some of those straight stretches back up the line?"

He took off his cap and scratched his head. "Oh, I reckon we were loafing along at about ninety. Why, was you scared?"

"Scared! Say, mister, I'd like to go right back and do it all over again!"

My answer made him grin, and that smile gave me a glimpse of buck teeth. And when I got my breath I shouted: "Lordy, if it ain't Red Buck! Where in the hell have you been all these years?"

It was the old boy, all right. Well, we held down a hamburger joint until the porter threatened to sweep us out.

Then we drifted over to Grant Park, and continued the reminiscing.

"Speaking of those old mule-cars, have you any idea how fast they traveled?" I asked him.

"Oh, the speed was dizzy, all right! Counting the stops for passengers, putting the cars back on the track, and hauling an occasional mule out from under one of the chariots, I reckon they made all of four miles an hour."

Then I asked him: "Ever hear of a hot-box on those old mule-cars?"

"No, I didn't, but I heard of plenty of hot drivers. One I remember very well. His car ran off and left him when he went back to lick some kids stealing a ride on the rear step."

We both had a big laugh. I have never seen Red Buck since.

AN engineer on the U.P. wired the superintendent that his engine was disabled as follows:

To Supt. P. H. McGrew:
A bursted flue
On Number Two.
What will I do?
Engr. O'Donihew.

He received this answer to his wire:

To Engr. O'Donihew:
You plug that flue
On Number Two,
Or I'll fire you.
Supt. P. H. McGrew.

—W. D. Adamson, N. Platte, Neb

* * *

WAITIN' FOR THE FLYER

WHEN the summer day is endin'
An' it's nigh the time to rest
An' the high-lights hit the hilltops
As the sun sinks in the west,
An' the milkin' time is over
An' the cows turned in the lane,
Then I step down to the crossin'
Just to see the evenin' train.

She's the fast one on the roadway
An' makes 80 mile' an hour
Streakin' thru 'bout 20 coaches,
My! that's ingin's got some pow'r;
An' I stan' there lookin', listnin',
Seems my spirit's risin' higher
For there's somethin' kinda thrills me
Waitin' there to see the flyer.

It's so still it's kinda lonesome
An' a late bee home'ard flies,
As I lean aga'nst the gateway
An' squint 'long the string o' ties.
Hark! a faint toot in the distance,
Now I won't have long to wait,
She'll be goin' by like jehu
Fer she's 'leven minits late.

Now I hear a distant rumblin'
While she's rushin' o'er a bridge,
When she comes 'long Hokum's ridge.
Now a noise like muffled thunder
As she shoots on thru the cut,
Then whizzin' 'round the bend she comes
A belchin' smoke an' sut.

Comin', speedin' like a rocket
Makes that ingin' rock an' sway
An' look bigger every second,
Seems like I'll be in the way.
I can see her drivers whirlin',
Hear 'em clankin' on the rails,
Then a flashin' by like lightnin'
On o'er the line she sails.

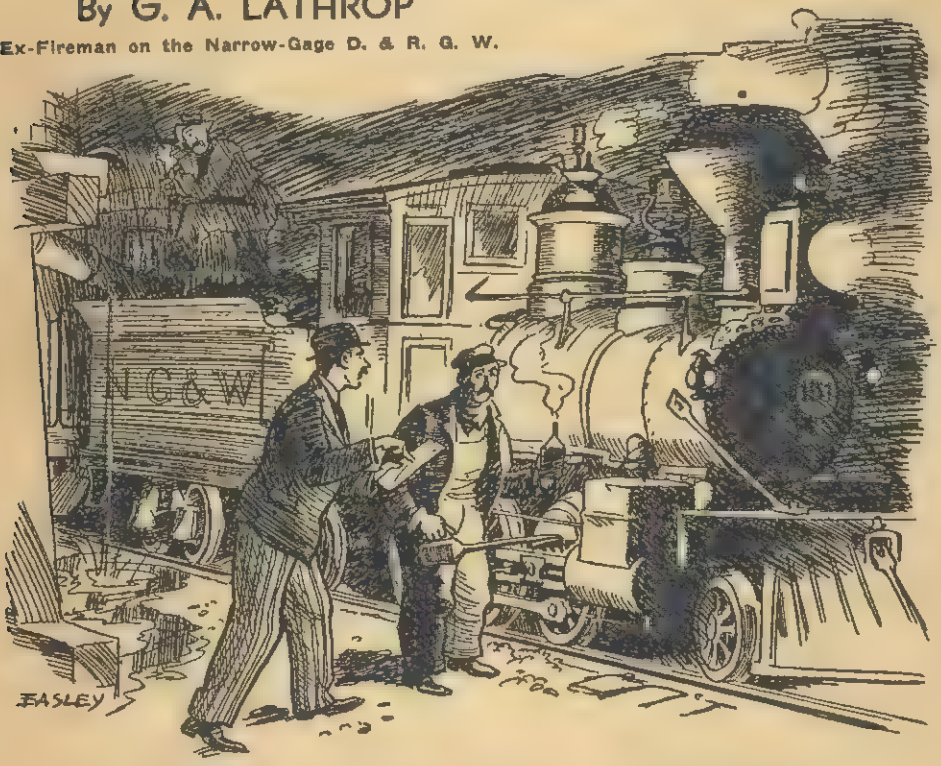
An' cinders, dust an' pebbles
Trail the last coach in the rear,
An' the way she's disappearin'
Leaves me feelin' kinda queer.
An' the people by the windows sit
An' wave me, "Hello, Hi,"
Makes me feel like goin' with 'em
When the flyer's dashin' by.

—D. R., in Syracuse Post Standard.

The Last Rockaway

By G. A. LATHROP

Ex-Fireman on the Narrow-Gage D. & R. G. W.



Even the Road Foreman Couldn't Shake Billy Cook's Faith in His Old 151

LATE fall, 1886. And Dead Man's Point had set a trap for No. 2, night passenger train on the Narrow Gage & Western. Thirty minutes ago a granite boulder had crashed from a ledge high above the track and knocked a chunk out of the thirty-five-pound outside rail. Now No. 2 was chuffing up through the Black Canyon unaware of her danger. Her headlight was a pale orange moon shimmering ahead of the long wooden pilot.

Behind the diminutive tender, links and pins jangled while safety chains rattled between the seven capacity-laden open-vestibuled passenger coaches. Little Billy Cook, the engineer, wasn't thinking about his passengers tonight. His whole mind was centered on getting the best—usually a mighty thankless effort—out of his only love, the 151, a small 2-6-0 with a deckless cab. She was a "rockaway" engine, dubbed thus by the Narrow Gage heads because of her habit of rocking from side to side according to her speed. But she could wheel seven coaches at better than sixty miles an hour, under favorable conditions. Her slide

valves were square as a die, each exhaust through her diamond stack exactly the volume of the last.

These little rockaways were not popular with P. J. Neill, the road foreman of engines. For one thing, they were poor steamers owing to the size of their flues, one and a quarter inches. Unless an engineer exercised extreme care in starting, the first exhaust usually picked up the fire and plastered it solidly against the flue sheet. Mr. Neill saw to it that each rockaway was supplied with a two-tined fork with which the fireman tried to knock this solid clinker away from the flues on such occasions.

Billy was late out of Cimarron, west end of the Fifteen Mile Canyon. From there to Crystal, one and a half miles, he'd let his train roll almost too fast for the twenty-two-degree curves, but with a new roadbed and new ties they had held the rails like they were glued. From Crystal east to Gilson, thirty-eight and one half miles, was all up hill on a water grade.

Crossing the long steel trestle over the Gilson River, Billy gently wooed out his throttle until his practiced ear assured him his pet had not plastered the fire against the flues. Then, with a sigh of content, he settled back against the cab, blue eyes squinted to the cinder blast.

Joshua Mosier, his fireman, six feet two, stooped to keep from knocking his head on the cab ceiling and took up his No. 3 scoop. Josh was an artist with the scoop. When he didn't keep 'em against the peg something was wrong with the drafting.

"Got a heavy tail on our kite tonight, Josh," Billy yelled in a high-pitched voice.

Josh straightened enough to throw a look of disgust. "Wouldn't be too heavy fer one of them new ten-wheelers th' company is workin' out of Denver," he shouted back, for he liked to kid the engineer.

Billy bristled. "This engine is plenty heavy for th' bridges through this canyon! She weighs almost twenty tons. Them new ten-wheelers weigh almost twenty-five tons, an' that's some difference in weight."

Josh grinned as he bowed his back. Little Billy and his eternal defense of the 151. The fireman was working hard now. It took steady firing to keep this galloping goose hot, and tonight Billy needed steam. He was pulling almost a hundred and forty tons, a tremendous weight for the 151.

THEY hit the sag by the twin pines, a mile below Dead Man's Point, and Billy eased off on his throttle so he could widen on his non-lifter injector. The sag negotiated, he tugged out the throttle. The 151 coughed throatily. Billy cursed. Josh mumbled to himself. A fellow didn't have to look in the firebox to discover that the flue sheet was solidly plastered. Sense of hearing was enough.

Billy glanced at his water glass, a recently installed gadget. It was almost full. By the dim glow of an oil light the steam gage showed 145, maximum pressure.

"Reckon I'll pull above Dead Man's Point," he told Josh. "Th' hind brakeman won't have to go back flaggin' so far on that straight stretch. I got enough steam to last."

Josh yelled: "I'll see if I c'n knock that damned clinker down," and pulled the hook over the coal pile. He opened the door, knelt and shoved the hook into the firebox. With this he began trying to get the teeth back of the clinker.

Billy shut off his throttle to ease the suction against the solid mass. The 151 heeled to the beginning of the sharp curve about Dead Man's Point. Billy was watching his fireman, body turned on his seatbox. He finally shook his head.

"Ain't no use, Josh," he shouted. "I'll try an' get 'em—"

His words abruptly chopped off. The 151 had found a trap. Straight toward the Gilson River she nosed, rocking and plunging from side to side. Her snout smashed into a massive chunk of granite, moved it to one side. Billy had set his straight air with the first thump of pony truck wheels on ties.

With a hissing splash the 151 went into the river. She seemed to hesitate a second, then the shove of the cars behind moved her enough so she went over on her right side. Josh, trying to get out the window on his side, was thrown violently d o w n w a r d and crashed into Billy. The sullen, blue-black water of the roaring river closed over them both.

But not for long. With Billy firmly grasped in ham-like fists, Josh fought his way to the surface. Four inches above his head he saw the night sky framed by a square which had been his cab window. He pulled himself through with one hand, dragged his engineer through with the other.

Save for a mass of bruises, Josh was unharmed. But Billy was out cold. A doctor on the train found some broken ribs, a broken arm and a bad cut across the forehead. Aside from a slight shaking up, none of the passengers were hurt.

This time Dead Man's Point hadn't quite lived up to its title. The name had originated when eleven men, let down on a scaffold during construction of the N. G. & W., were dropped to their deaths by breaking ropes.

"I'M bettin' she's too badly messed up to be repaired." Those were the first words Billy Cook heard when he opened his eyes to consciousness. He lifted his head from the mattress on which he lay in the baggage car.

"What's that?" he demanded in a voice surprisingly strong for an injured man. Now he could see the speaker, Noel Button, conductor of No. 2.

"So you're finally come to, huh, Billy?" Noel inquired. "I was just remarkin' your One Fifty-one is too badly stove up to be repaired. A good thing, I call it. You been runnin' her a long time. Ran her out of Denver before the road was cut up into divisions. And you came here to the Third Division because your engine was bein' sent over here. Didn't you?" he ended accusingly.

"Seein' as how I broke her in new from th' factory, why not?" croaked Billy. His voice rose. "If it hadn't been for th' 'Fifty-one pluggin' her flue sheet tonight th' whole train would have went in th' river." He beamed with satisfaction. "But you're all wrong about not fixin' her up, Noel. You see, th' bridges in th' canyon won't carry a heavier engine."

The conductor shrugged. "Well, if they do fix her up both of you'll come from th' back shops about th' same time."

Billy didn't turn a hair at this callousness. He nodded agreement. "Yep. Won't hurt my feelin's none. I'd hate to have to get along with another engine anyhow." He closed his eyes.

Noel wasn't surprised. Every engineer on this whole pike felt the same way toward his pet. Each was assigned

a regular locomotive. When she went to the shops for repairs her engineer usually accompanied her there and paid board and room on his own time until she was ready to come out again. He even went down to the shops and helped at the repair job. "Pooled" engines were unknown those days, although some of the boomers who occasionally came through told of Eastern roads that had "bought all their engines back from th' engineers an' worked 'em to suit themselves."

But so far as the Narrow Gage & Western boys were concerned, that was a lot of horse feathers.

Billy wasn't there to see his 151 fished out of the river by the aid of a "dead man"—a couple of twenty-ton 2-8-0's and heavy block and tackle. He was over in Cleora in the hospital. And was making a pest of himself while his broken bones knitted properly. From lowest flunkey to surgeon in charge of the railroad hospital, his sole question was: "Are they startin' to fix up my engine yet?"

The master mechanic, known as "The Beak," dropped around to visit the hospital, because Billy was a likable little bird as well as a good engineer.

Billy stopped the M. M. before he got through the door to his ward. "How about my 'Fifty-one? Are you workin' on her yet?"

The Beak eased inside, a smile on his face. "She came deadheadin' in on 326 last P.M., Billy. I looked her over this A.M. Her smokebox is smashed, right cylinder-head caved in, frame busted just back of the right intermediate driver, and main rod is bent."

With each new damage to the engine Billy's face grew a bit longer. When The Beak halted he gasped: "Is that all?"

"Cab is stove in."

"Are—are they gonna fix her up?"

"Them rockaway engines never have been any good—"

"They're th' fastest this company will ever own!" blazed Billy.

"Tie more than five coaches on their tails and they won't make the time," The Beak went on as though Billy hadn't interrupted.

The little engineer let his head drop back on his pillow and closed his eyes.

"But," said The Beak, "owin' to the shortage of power down on the north end out of Denver, there's nothin' else to do except put her back in shape and turn her over to you again."

The patient opened his eyes. A wide smile of satisfaction spread across his face.

BILLY COOK ran his 151 from Cleora over Old Baldy Pass to Gilson. He was fresh out of the hospital, the engine fresh out of the back shop. Josh Mosier had deadheaded over to fire her on her "breaking in" trip. Billy was tickled pink to see Josh again, didn't realize how he'd missed the big, bluff tallowpot until he met him once more.

Josh was a real side kick on a locomotive. He kept the drivers and side-rods clean as pins. His headlight and cab lights were always properly cleaned and the wicks trimmed. No letting a deck get sloppy with Josh in the cab. He had a broom with a sawed-off handle . . .

Yes, sir, Josh was all railroader. Billy knew that right down inside the fireboy thought as much of the 151 as he himself did. He might grumble and growl about her—like some men grumble and growl about their wives—but let some other man make a disparaging remark about them and it's

just too bad. A couple of old grannies with the 151, this pair of enginemen.

They went back on the night passenger run west of Gilson. Under the babying of Billy and the expert firing of Josh, the rockaway managed to handle her trains with about a half on-time record. It was rumored that Mr. Neill, the road foreman of engines, had recommended scrapping all of the rockaways.

Sandhouse gossip grew more and more pronounced: "Gonna junk th' rockaways an' replace 'em with them new ten-wheelers that's workin' out of Denver. Th' company is gonna either standard-gage that end or get some heavier passenger engines to handle their increased business."

Billy argued against such a move with everyone who would listen to him. And Josh sided with him. Nothing wrong with any rockaway, least of all the 151.

But the rumor grew more persistent. It came to a head the night Billy was forced to stop and blow up steam seven times between Cimarron and Gilson, forty miles.

Coal a little too fine for one thing, half a dozen flues leaking for another. Those flues were a mess, always had been. There were so many of them, and they were so small nothing seemed to make them hold against water and steam pressure.

The roundhouse foreman in Gilson answered plenty of correspondence about that delay. He told the truth. Those eternally leaking flues . . . the way the exhausts plastered the flue sheet with clinkers . . . the fact that the rockaways were a little too light for the tonnage they were required to handle up the Black Canyon . . .

"Billy," the foreman greeted the midget hogger and his big fireman when they got in one morning after another night of blowing up steam account of flues leaking, "you won't have to put up with her much longer. Travelin' engineer is gonna ride with you in the next few days and if these engines are what we think we'll get them new ten-wheelers off th' north end."

Billy was wild. "So he's gonna ride with us an' try to discredit th' 'Fifty-one, huh?"

"She's already discredited, so far as that goes," replied the foreman. "All th' rockaways are. It'll be a mere matter of official verification."

"Some of these rockaways might be lemons, but th' 'Fifty-one is okay," put in Josh loyally.

"Well, I just told you what I know," grunted the foreman with a shade of disgust.

BILLY and his tallowpot made two round trips and were in Serene, halfway over the division coming east on their third trip, before they saw the traveling grunt. He came toward the engine while Billy was down tinkering with the set screw on the main rod brass. This far the 151 had performed fairly well. She'd plugged her flues only once and the flue sheet was dry. Billy looked up and nodded coldly.

"I'll ride from here to Gilson with you tonight, Billy," said the official. He kicked a side-rod. "Not much good, is she?"

The veteran runner looked hurt. "These engines are th' best th' N. G. & W. ever owned," he defended.

"What—"

"Yes, sir. This 'Fifty-one is slick as a whistle—when she ain't loaded too heavy."

"Well, slick as a whistle or no, tonight will tell the tale." The traveling

grunt walked stiffly toward the gangway and pulled himself into the small cab.

Billy stood looking after him, a cloud of worry on his face. It would be just like the 151 to start performing the moment they pulled out of Serene.

Of course, having seven coaches tonight, the train would be split and run in two sections to Cerro Summit, where it would consolidate. Billy would get a helper with five cars, the other section would follow with one engine. Billy could make the helper engine do all the heavy work to Cerro and barely crack the throttle on his pet.

They went into Cerro Summit, with a helper engine mad as a hornet owing to the way he had to work his engine. When Billy shut off the 151 popped. He grinned widely. The official made no comment.

The train consolidated, Billy dropped down the six miles of four per cent right on schedule. He was a good man with straight air and held his seven cars to an even speed all the way.

But the crew of the 151 both knew that ahead of them lay a forty-mile grind through the canyon to Gilson, all up hill. Once Billy moved his lips and laid his gloved hand on the side of the boiler. He seemed to frame the words: "Don't lay down on us tonight, old girl!"

LATER the traveling engineer told about that run. "It was the neatest piece of railroading I've ever seen," he said. "Billy digested every exhaust of his engine from Cimarron to Gilson. His tallowpot, Josh, picked out fist-sized lumps from the tender and almost fired them by hand. And he kept her hot. When we hit that six-mile straight stretch below Gilson, Billy leaned back with a smile and widened on the 'Fifty-one. That little rockaway clicked off a mile a minute all the way in from there. And they hit Gilson five minutes ahead of time.

"What could I do? My orders were to ride her and report on her performance. It was perfect. So I expect Billy will hang on to his rockaway for a while longer, although it's only a matter of time before those heavier ten-wheelers from the north end will replace all those little fellows."

Billy and Josh were happy as a couple of kids over the way their pet performed. But next trip she made up for everything. She lost almost an hour on her run. Billy and Josh literally babied her over the road. They cursed her, talked to her, begged her to behave.

Most of the other men working on the rockaways were getting pretty well fed up with them and hoped it would not be long before some "good" engines were sent to replace them. Not Billy and Josh! On their "lay-in" days they spent all their time at the roundhouse tinkering on the 151, polishing her, cleaning her up, making adjustments.

So the 151 stayed on the night passenger run. Fall faded into early winter. Little snow was on the ground, but the nights were getting mighty crimpy. Passenger business had fallen off. The night passenger usually went over the road with only five cars.

They were coming east that night. Billy made a perfect stop at the water tank in Cimarron and dropped off to oil around. Footsteps crunched through the cinders behind and Billy straightened, flaring oil torch raised above his head. He grunted softly. He didn't know this fellow. Looked like a dude with his gray striped pants, black coat, clipped moustache and side burns.

"You're Billy Cook?" questioned the stranger.

"I'm Billy Cook," the runner answered shortly. He couldn't stand there visiting all night, with the 151 needing some oily attention.

"I'm P. J. Neill, road foreman of engines."

"Oh." Billy looked down at his right hand, smudged with black oil, and changed his mind about offering to shake.

Mr. Neill reached in his inside coat pocket, pulled out a thick packet of papers. Tapping them suggestively, he said:

"This bunch of records is practically the life history of engine One Fifty-one."

Billy nodded, with sinking heart.

"Her case history reads like a misspent life," said the road foreman.

"If yuh mean she's sort of temperamental—" began Billy defensively.

"I mean she's a lemon; always has been."

"You're mistaken, Mr. Neill. There ain't nothin' wrong with th' 'Fifty-one."

"That's your contention, is it?"

"It is."

"Then only one thing else must be wrong. If, as you claim, this locomotive is mechanically okay, the trouble must rest with the man running her!"

BILLY gulped, realizing the trap he had let himself into. Then he brightened. So far this trip the 151 had performed perfectly. Her flue sheet was dry as a bone. They had an unusually good tank of coal.

"According to our records, you've been her engineer from the day she came to this railroad brand new," Mr. Neill went on.

"That's right. I broke her in—"

"And she has never performed well."

"Yuh can't exactly say that—"

"I *do* say it. I was commissioned by general offices to come out here personally and check up on engine One Fifty-one and her crew."

"I—I—" stammered Billy.

The road foreman pulled out his watch, glanced at the hands. "You'll leave here on time. Ahead lies forty miles of water grade. Both your own future and the performance of this engine hang in the balance tonight. I'm checking it every foot of the way."

Mr. Neill walked briskly toward the coaches behind. Billy shook his head and resumed his oiling around.

Josh found a very sober engineer sitting in the cab when he came from cleaning his ash pans. "Matter, Billy? 'Fifty-one gettin' sick?"

Billy shook his head. "Worse than that," he grieved. "We got Neill ridin' with us tonight, checkin' on our performance."

The big fireman grinned. "What of it? If our galloper don't do her work—"

"It's worse than that, Josh," interrupted Billy. "I told him th' 'Fifty-one is okay. So he says if she's okay then all these delays we been havin' must be on me."

The fireboy whistled shrilly. Then, with a wise nod of the head: "In which case we'll see that she does her work from here in, or else—"

"Or else," repeated Billy. Furtively he raised his left hand, patted the jacket at his side. "Listen, old girl," he said in an almost inaudible tone, "yuh got to make good tonight. Yuh got to show me yuh appreciate th' care I've taken of yuh all these years—"

The Black Canyon swallowed the 151 and her five-coach train. Billy let

them drift rapidly toward Crystal. When they hit the high steel bridge over the Gilson River Billy began wooing out his throttle.

With a prayer the engine would not fail him tonight, he slipped his half notch in the second slot in front of the center of the quadrant and let his reverse down against it. Exhausts grew from soggy to clear as evenly spaced bells. Billy relaxed and his lips twitched in a smile. She knew!

Abruptly the smile faded and Billy jerked forward. The exhausts had changed with Josh's last fire. Now they were muffled, a lot like a fellow trying to talk with a mouth full of mashed potatoes. The needle on the steam gage started rapidly downward. In the deck he heard Josh muttering angrily, then the clatter of the clinker hook as it was pulled over the coal pile.

Jock opened his fire-door, beat viciously at the clinker over the flue sheet. Just when Billy was ready to shut off steam and halt Josh grunted with satisfaction.

"Knocked it loose, Billy," he yelled and stooped to his task again.

Billy glued one eye on the steam gage, the other on the illumination cast by the oil headlight. The steam didn't come up like it should. Maybe some of the clinker still plastered the flues.

"We got a couple of 'em leakin'."

Josh poked his head in the cab behind the engineer and made his announcement.

Billy wiped beads of sweat from his forehead. "Yuh mean she's gonna fail us after all?" he asked unbelievingly.

They were forced to stop and blow up steam a mile east of Dead Man's Point. Delay, forty minutes. Billy was sure Mr. Neill would come over to find the trouble, but the road foreman remained back in the coaches.

BILLY drifted through the sag at Currecanti, and Josh was able to regain ten pounds of lost pressure while Billy worked the water in his boiler from a flutter in the bottom gage cock to two full ones.

At Sapinero, east end of the canyon, Billy halted for the station with a dozen flues leaking and ninety pounds of steam. The hand which closed the throttle was rough and the look he gave to the steam gage glinted angrily. Tumultuous thoughts were racing through Billy's mind.

All these years he'd fought for his engine. He'd allowed no one to insinuate she wasn't efficient. Tonight, when he'd agreed all delays were his fault instead of hers, he'd thrown his job and seniority in the balance. Mr. Neill had but to turn thumbs down and Billy would be hunting another job.

Knowing he needed her support, the 151 was deliberately laying down on him. To the little engineer she was not a dumb mass of man-made machinery. She was a personality, a mighty temperamental one.

A betrayer! Yes, sir, that's exactly what she was proving herself.

Billy shut off his throttle and drifted to a halt at the depot in Gilson three hours late. Water roared from the flue sheet, dripped down through the ash pans. While he waited for express, mail and passengers to be unloaded he dropped tiredly from the cab.

Mr. Neill should be coming over to slip him the bad news any minute now. Billy thumped hands on hips and looked at the 151. There was no affection in his gaze. It was filled with anger.

When he halted her over the cinder pit forty minutes later he dropped down with his satchel. Pausing beside her he deliberately kicked her main

rod. "Yuh—yuh—" he mumbled, then grew silent.

The roundhouse foreman waited for Billy in his office. Without wasting time he said: "Neill was in here while Number Two was stopped."

Billy grunted.

"He left orders to pull the 'Fifty-one out of service — permanently. Four of those new ten-wheelers are coming west from Denver to replace all rockaways."

"About me," stammered Billy, "what did he say?"

"He just said you was a good man with an engine, but a damned fool about one of 'em."

"Then I'll get one of th' ten-wheelers?" the little man asked unbelievingly.

"Yeah."

Billy knew he should feel a load raise from his shoulders. And yet he didn't. The 151 to be junked! There flashed through his mind the dozens of times she had clicked off schedule, times when she had made phenomenal showings against odds. The rockaway had saved his life at Dead Man's Point that night. If she hadn't plugged her flue sheet Billy would have hit the broken rail making scheduled time, instead of slowed almost to a walk.

Damn it! Seeing her junked was going to be like burying a loved one. Billy turned away, gazed out a dirty-paned window toward the 151.

The roundhouse foreman chuckled. Then: "Funny some of th' comical ideas these general officials get at times. Neill told me he's gonna get some bridge carpenters over here to build a house, open on all four sides, with a tin roof over it, and butted up against th' east end of th' depot—"

"Yes, but—" Billy interrupted what he thought was beside the point.

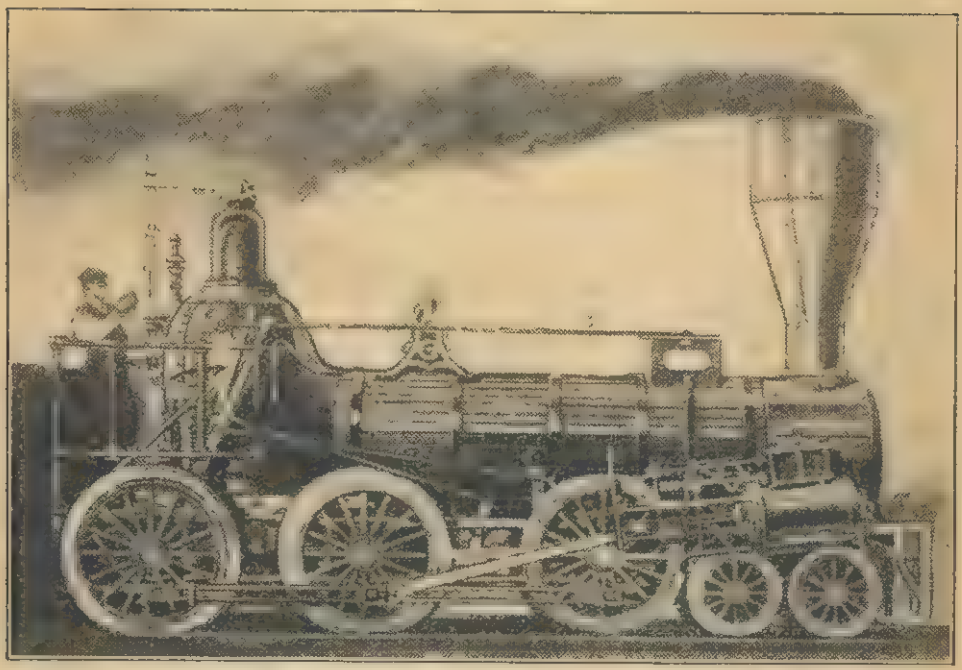
The roundhouse official ignored the interruption. "He says fer me to paint th' rods an' tires on th' One Fifty-one an' get her ready to be shoved under that tin roof so passengers c'n look her over as a famous curiosity. He says she'll be quite a curio as th' years slip by an' engines get bigger an' have more safety devices on 'em."

"She ain't gonna be junked!"

"Hell, no! She's gonna be honored as th' last remainin' rockaway in th' whole world!"

"Well, now, that's fine!" Billy grinned widely. "The ten-wheeler might be a great engine," he admitted, "but this one—well, a feller might marry a dozen times, but never think as much of any wife as he did his first."

The Ten-Wheeler



The "Chesapeake" Was Not Only the First Practical Ten-Wheeler; She Was Also the First Six-Coupled Engine to Attain Any Degree of Success

By ARTHUR CURRAN

Author of "The Pacific Type," "The Mogul," etc.

THE *Chesapeake*, designed by Septimus Norris and built in 1847, was the first practical engine with 4-6-0 wheel arrangement. Her cylinders were 14½ x 22 inches, drivers, 46 inches in diameter, and her weight was 20 tons. She had inclined cylinders, a balloon stack and no cab. Other peculiarities were hers, but they need not engage attention. This engine is of interest mainly as showing at what an early date this very useful wheel arrangement originated.

Norris and other early designers of 4-6-0 engines scarcely could have been expected to foresee the wonderful future of the type. Even those who followed thought of the ten-wheeler as a freight engine; which, indeed, it was—and a good one.

When the conquest of the Rockies began, railroad men saw very quickly that this type would have to be used in passenger service. So it was. But the passenger 4-6-0 of the West was not much different from the freight ten-wheeler of the East, having drivers of 63-inch diameter or less—usually less.

Meanwhile, the East found that something more powerful than the 4-4-0 type was needed to cope with certain through jobs, especially those between New York and Chicago. Trains of ten cars or more were becoming fairly numerous, and the demand for speed was beginning to be felt. Improvement in mail service was another objective. Engine crews liked the American type and so did officials, but the facts called for a new policy in the development

Typical of the First Express Ten-Wheelers Developed by the Michigan Central Was No. 277, Built by Schenectady

Fifteen Baldwin-Built Ten-Wheelers Like This Hauled the Fast Expresses of the N. Y. C. & H. East of Buffalo Twenty-five Years Ago

This High-Wheeled 4-6-0 Was Built by Baldwin in 1900 for the Rock Island. Originally a Vauclain Compound with 78-Inch Drivers, She Was Rebuilt to Simple, and Thicker Tires Were Applied to Her Drivers, Making Them 79 Inches Across

of motive power. It came much earlier than many suppose, and reflects great credit upon those responsible for it.

The pioneer in the field east of Chicago was the Michigan Central which, in 1887, developed a ten-wheel express locomotive with 19 x 24-inch cylinders, 68-inch drivers and weight of 118,000 lbs. This class, built at the Schenectady Works, presented a very distinct advance over the 4-4-0 engines of the day, as well as a very handsome appearance, as will be noted by reference to the photo of No. 277.

The most famous of the trains handled by these engines was the *North Shore Limited*, consisting of Wagner vestibuled cars. Three other trains—occasionally very un-limited!—tested the capacity of these engines. On the Michigan Central consists were made up to what they could haul—and that was plenty.

In 1889 Schenectady built a cross-compound for the road with 20 and 29 x 24-inch cylinders, 68-inch drivers and weight of 127,000 lbs. An interesting feature was the position of the bell ahead of the sandbox, instead of back of it. Eventually she was changed to a single-expansion engine.

A year or two later, the Lake Shore & Michigan Southern (NYC) began to use the ten-wheeler in passenger service, Brooks being the builder. These successful locomotives have been described so often that further comment is unnecessary.

Chicago, Milwaukee & St. Paul No. 797 was built at Rhode Island Works in 1889, with 19 x 24-inch cylinders, 64-inch drivers and weight of 114,000 lbs. It will be noticed that the drivers were rather small, but it must be remembered that the policy of Western roads at the time was very conservative in this regard. The engine was well designed, however, and of good appearance. Of interest are the crescent counterbalances of the drivers. This was a very early use of a device which became standard with all builders many years later.

BY 1899 William Buchanan decided that the New York Central needed ten-wheelers, so he ordered ten from Schenectady, Nos. 948-957, later 2000-2009, with cylinders 20 x 28 inches, drivers, 70 inches and weight of 165,500 lbs. These were the last engines he designed.

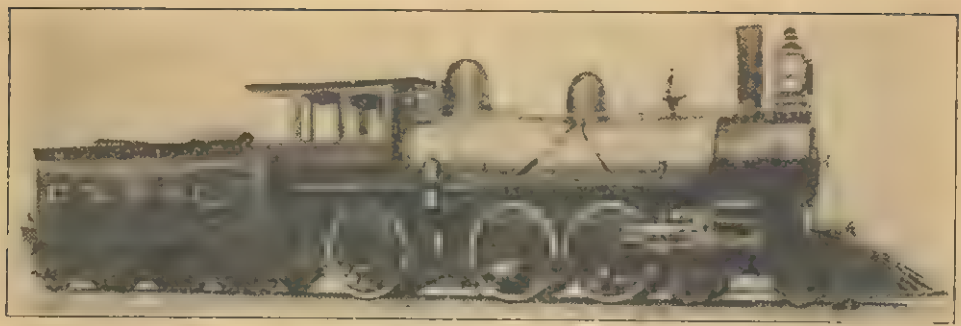
They were followed, in 1900, by 15 more built by Baldwin to the order of Arthur M. Waitt, S.M.P., who had been Mr. Buchanan's assistant and was now the boss. These engines, Nos. 2010-2024, had 20 x 28-inch cylinders, 75-inch drivers and weight of 175,000 lbs. One of them, No. 2013, is shown in the accompanying photo. They handled the Michigan Central trains east of Buffalo and are of interest as having retained their original numbers throughout their lives. Buchanan's 2000-2009 series was assigned to Lake Shore and Big Four jobs east of Buffalo.

By this time some very handsome ten-wheelers with large drivers had been built for high-speed service. Notable among them were the B.&O. Baldwins with 78-inch wheels, and the L.S.&M.S. Brooks with 80-inch drivers. The former were used on the *Royal Blue* trains, and the latter on the *Twentieth Century Limited* west of Buffalo.

Baldwin also built some very fine ten-wheelers for the Union Pacific mail and Overland trains, and for service on the Rock Island. The Pittsburgh Works built some nice ones for the Chicago & Eastern Illinois, and various other roads in the Middle West.

When Frank W. Morse took charge as superintendent of motive power of the Grand Trunk, he found a collection of 4-4-0 and 2-6-0 engines which had been put on the road by Herbert Wallis, his predecessor in office. These engines were very interesting historically and, in some cases, handsome as well; but not equal to the demands of traffic.

Mr. Morse, therefore, got busy on designs for ten-wheelers. These engines were built at Point St. Charles and by Baldwin and Schenectady. Some had 69-inch drivers and others had 73-inch wheels, but all were good-looking and exceedingly smart, with a very sharp exhaust. They were finished in bottle green with aluminum let-



No. 797 of the Chicago, Milwaukee & St. Paul, Built by Rhode Island in 1889, Was One of the First Engines to Use Crescent-Shaped Counterbalances on Her Drivers

Finished in Bottle Green with Aluminum Striping, No. 1031 of the Grand Trunk Was as Smart-Looking as She Was Husky

On the Minneapolis, St. Paul & Sault Ste. Marie ("Soo Line") the Cross-Compound Locomotive Was Very Popular for a Time. This Is No. 503, One of the Road's Cross-Compound Ten-Wheelers Built by Schenectady. She Had 20 & 32x26 Cylinders, 73-Inch Drivers, 200 Lbs. Pressure, Weighed 136,000 Lbs., and Exerted 18,975 Lbs. Tractive Force

tering and striping. One of the Baldwin engines, No. 1031, is shown on this page. Her cylinders were 19 x 26 inches, drivers, 73 inches, and her weight, 169,100 lbs. The Baldwins with 69-inch wheels, incidentally, were used on the Grand Trunk Western.

The Schenectady engines were knock-outs. Their cylinders were 20 x 26, their drivers, 73 inches and their weight, 182,000 lbs. Steam pressure, 225 lbs. The tender was mounted on 43-inch wheels with spokes, and carried 7,000 gallons and ten tons of coal.

Remember, dear reader, this was a generation ago! Nobody had whispered anything to Frank Morse about super-power nor any other of the new tricks. All that Morse knew—poor man!—was how to design locomotives. He figured that if the proportions were right, the engines

Missouri Pacific No. 297, Later 7801, Baldwin-Built 50 Years Ago

would be right. And he believed in high steam pressures, in which he was ahead of his time, and which must have given the old G.T.W. the surprise of its life. Certainly those rifle-shot exhausts must have knocked the old mossbacks off their seats!

Eventually ten-wheelers were built to weights of over 200,000 lbs., but these were not the engines that made the type famous.

The success of the ten-wheeler encouraged the running of heavy passenger trains. This was profitable, but its tendency was to hold down the general level of speed. It thus happened that few really fast trains were run for a number of years, the railroads being content to pack 'em in on heavy jobs that " bowled " along at not much more than 45 m.p.h. As there was no faster transport, the scheme worked.

When it became evident that more speed would be required, the roads tried to step up the pace of these heavy trains. They did not want to run a lot of light trains, as this would have increased costs.

Up to a certain point the 4-6-0 would do the work; but in due course its possibilities were exhausted. At the time railroad men had the choice of several types as the means out of their difficulties. In the end, however, they had to adopt the correct wheel arrangement. That was the 4-6-2 or Pacific type.

The Golden Jubilee of Canadian Transcontinentals

THE summer of 1936 is Golden Jubilee year for Vancouver, British Columbia, and all roads lead to the evergreen city out on Burrard Inlet, Canada's western gateway. But July 3rd was Port Moody's special day. Situated at the head of Burrard Inlet, 12 miles east of Vancouver, it saw the arrival of the first transcontinental train over the Canadian Pacific on July 3d, 1886. The 2907 miles from Montreal was made in 136 hours and one minute, excellent for trains of that day. Not until the following spring, on May 23rd, did the first through train reach Vancouver.

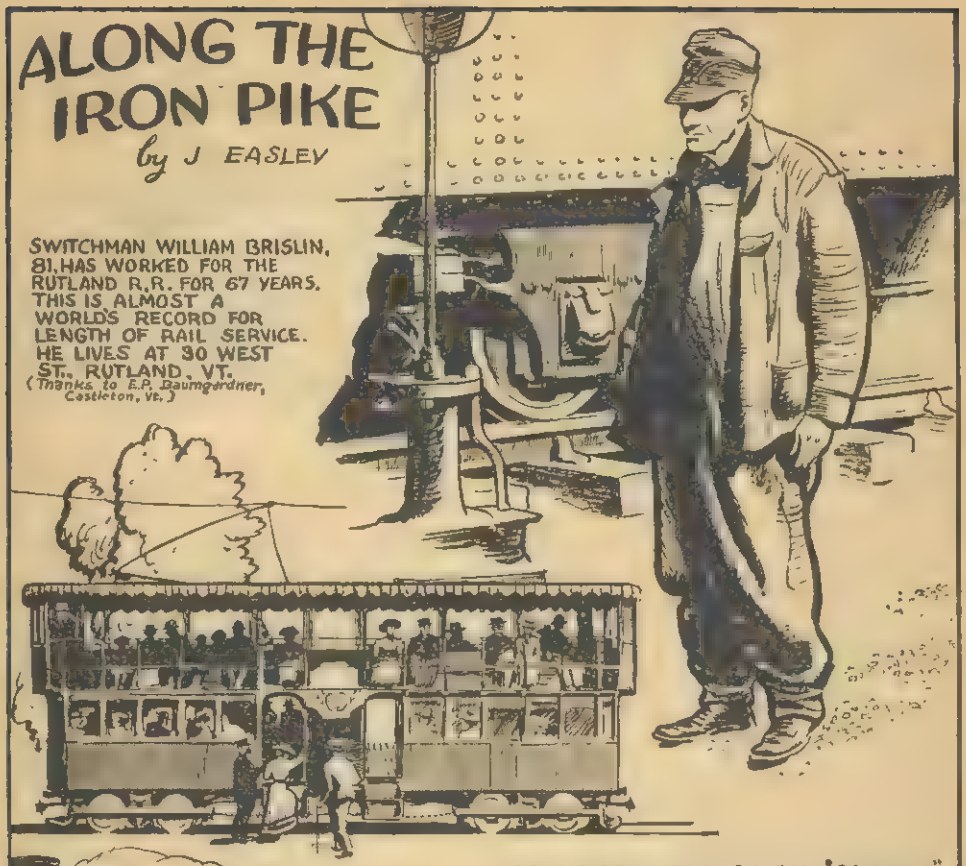
Port Moody was as dressed up for the jubilee this year as it was on that gala day half a century ago. Men, women and children appeared in clothes lifted from the bottoms of old trunks, and went to town to see the sights, and to show modern folks how they did things in days of yore. But the chief attraction in the historical drama was the complete re-enactment of the first train arrival.

At Winnipeg was reconstructed No. 374, a sister locomotive to the 371, which pulled the original train on its last stage in '86. At Vancouver were assembled some seven wooden coaches, day and sleepers. Finally, this train was manned by two of its original crew. P. A. (Pete) Barnhart, now of Kamloops, was again skipper, and W. H. (Billy) Evans, nine years a retired master mechanic of Vancouver, wheeled the varnish drag into Port Moody with all the pomp and thrill of that day long ago.— Edmund E. Pugsley.

ALONG THE IRON PIKE

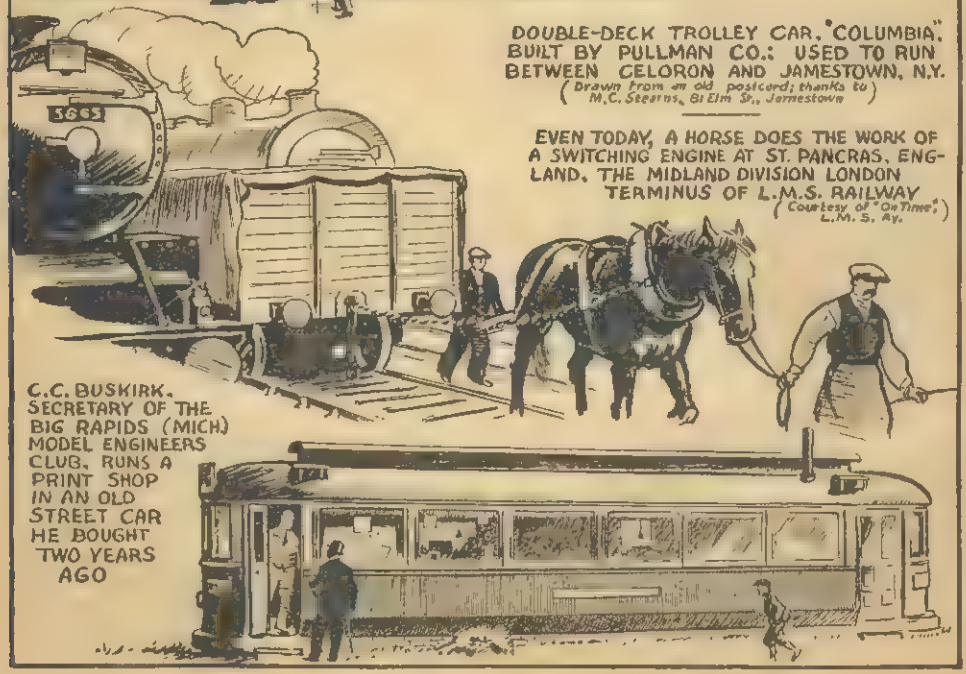
by J EASLEY

SWITCHMAN WILLIAM BRISLIN, 81, HAS WORKED FOR THE RUTLAND R.R. FOR 67 YEARS. THIS IS ALMOST A WORLD'S RECORD FOR LENGTH OF RAIL SERVICE. HE LIVES AT 30 WEST ST., RUTLAND, VT.
(Thanks to E.P. Baumgardner, Castleton, Vt.)



DOUBLE-DECK TROLLEY CAR, "COLUMBIA", BUILT BY PULLMAN CO.; USED TO RUN BETWEEN CELORON AND JAMESTOWN, N.Y.
(Drawn from an old postcard; thanks to M.C. Stearns, 81 Elm St., Jamestown)

EVEN TODAY, A HORSE DOES THE WORK OF A SWITCHING ENGINE AT ST. PANCRAS, ENGLAND, THE MIDLAND DIVISION LONDON TERMINUS OF L.M.S. RAILWAY
(Courtesy of "On Time", L.M.S. Ry.)



C.C. BUSKIRK, SECRETARY OF THE BIG RAPIDS (MICH.) MODEL ENGINEERS CLUB, RUNS A PRINT SHOP IN AN OLD STREET CAR HE BOUGHT TWO YEARS AGO

By the Light of the Lantern

Ask us what you want to know

RAILROAD questions are answered here without charge, but these rules must be observed:

(1) Not more than two questions at a time. No queries about employment.

(2) Always enclose a self-addressed, stamped envelope, to facilitate our getting in touch with you if necessary. We will print only your initials.

(3) Don't be disappointed if answers do not appear at once. They are printed two months before date of issue.

WHAT is America's fastest steam-powered train?

(2) How many railroad companies are operating in the United States?—J. R. L.

(1) Depends upon how you rate speed—whether you compare trains on the basis of complete runs, or on more or less equal station-to-station portions, or on more or less equal start-to-stop sprints. On the last-named basis the Pennsy's *Union* and *Detroit Arrow*, which average better than 75 m.p.h. for the 40.3 miles between Valparaiso and Plymouth, Ind., and the 64.1 miles between Plymouth and Ft. Wayne, respectively, deserve the fastest steam train rating. In next month's issue, incidentally, we plan to publish the most complete analysis of American train speeds that has ever appeared in print, and in it we'll compare America's fastest trains on equal terms.

(2) As we said on page 80 of our July, '36, issue, about 1,300.

WHAT are the United States' fifteen largest railways on the basis of 1935 operating revenues?—E. S., Montvale, N. J.

The following list names the roads and their gross operating revenues last year:

Pennsylvania	$367,812,186
New York Central System	310,192,979
Southern Pacific System	158,667,798
Baltimore & Ohio	141,873,643
Santa Fe	135,686,392
Chesapeake & Ohio	114,031,433
Illinois Central	97,496,696
Chicago, Milwaukee, St Paul & Pacific	92,473,703
Chicago, Burlington & Quincy	82,925,209
Southern	82,903,703
Great Northern	81,188,858
Norfolk & Western	78,044,384
Chicago & North Western	77,345,496
Louisville & Nashville	75,694,731
Erie	75,126,702

A. F.—All Shay type geared locomotives are built by the Lima Locomotive Works, Lima, O. The "Pacific Coast" Shay probably designates a particular design developed for use in the logging country of the West Coast states.

I CAN'T understand how boiler tubes, which I am told aren't welded, can be steam and water tight. Can you throw some light upon this matter?—L. G. M., Rice Lake, Wis.

Sometimes they *aren't* steam and water tight. Joking aside, however, they don't leak when and because they're tight, and they're tight when they're properly installed. Here's the way the job is done: "Swaged down" at the firebox end, the flue is pushed through the hole of the front sheet of the boiler clear back to the firebox, where it is driven almost a quarter of an inch beyond the flue sheet to permit "beading" of the end. But before it is inserted, a copper ferrule or bushing about 1/16 inch thick is put in the flue hole.

Then, with the tube in place, the projecting end is flared. Next an expander with an inner shoulder is inserted and driven in until the whole job is tight, and a newly-formed inner shoulder of the flue is firmly pressed against the ferrule, which itself is flared against the inside of the flue sheet by the force. Finally the flared end of the flue is "beaded" or turned back against the firebox flue sheet with a beading tool. As for the front end of the flue, it is merely expanded, and sometimes beaded. If the job is done properly, a tube will burst before it will leak. And the hotter the boiler becomes and the greater the pressure, the tighter will the tube remain.

Back in the Days When the Soo Line Was the Minneapolis, Sault Ste. Marie & Atlantic, Dan Willard, Now the President of the Baltimore & Ohio, Was an Engineer on That Line. This Rare Old Photo, Taken Just West of Weyerhaeuser, Wis., About 40 Years Ago, Shows Him Behind the Throttle of Engine No. 2

No. 6400, First of Five Streamlined 4-8-4 Types Just Completed by the Montreal Works for the Canadian National. They Have 24x30 Cylinders, 77-Inch Drivers, 275 Lbs. Pressure, Weigh 386,000 Lbs. without Tender, Exert 52,000 Lbs. T. F. The Montreal Works Also Completed Five 4-8-4 Types Numbered in the 6160 Series for Fast Freight Service

PLEASE describe the Worthington open feed water heater.—L. S., Montreal.

There are two types of Worthington open feed water heaters: the "S" and the "BL," both of which heat cold water from the tender by direct contact with steam from the exhaust (hence the adjective "open"). In the "S" type tender water is pumped into the heater (usually located just ahead of the smokestack) through a small pump operated by a steam turbine, mixed with exhaust steam in the heater, and forced into the boiler by a boiler feed pump. The "BL" type is a single unit (mounted on the left side of the boiler just ahead of the firebox), into which tender water is pumped by the cold water (upper) pump into the heater, where it meets the exhaust steam and forms hot water, which is forced into the boiler by the lower pump.

J. L., Stong, N. M.—Countless narrow-gage locomotives have been and are being built with outside frames, similar to the 450 series of the Denver & Rio Grande Western. While we can't think of any standard-gage engines so constructed, we do know that railroads with a gage as wide as 42 inches operate outside-frame locomotives.

L. G.—The old St. Louis, Lawrence & Denver, projected from Pleasant Hill, Neb., to Carbondale, Kan., was incorporated about 1870 by the Atlantic & Pacific, which leased it and operated it. Later its title was changed to the St. Louis, Lawrence & Western. What was built of it is now, of course, part of the Santa Fe.

WHAT is the financial status of the Florida East Coast and the Seaboard Air Line?—E. W., Miami, Fla.

After the collapse of the Florida land boom ten years ago, the over-expanded Florida East Coast experienced hard sledding, and even in 1929 its gross revenues were $13,446,015, and it showed a deficit of $1,325,259 after all charges. By 1932 gross revenues had dropped to $6,720,794, leaving not only $3,316,630 deficit after all charges, but a net railway operating deficit of almost $300,000. By 1934 things improved slightly, but last year saw a net railway operating deficit of $222,593 and a correspondingly large deficit after all charges.

Because its system embraced a larger territory, the Seaboard Air Line did fairly well up till 1929, when gross operating revenues were $58,151,908, leaving more than $1,000,000 net income after all charges. By 1932, however, gross revenues had dropped to $30,740,335, involving a deficit after all charges of $9,528,174. Last year and 1934 showed about 10% greater gross revenues, but net deficit still hovered around $8,000,000. Both the FEC and SAL are in receivership.

R. A. W., Kansas City, Mo.—The Rock Island's line never extended beyond Colorado Springs. In the past it has used the Denver & Rio Grande's track between Colorado Springs and Pueblo, but today does not operate to Pueblo at all.

(2) The 3-ft. gage Denver, Boulder & Western was constructed in 1893 from Boulder to Ward, Colo., as the Colorado & Northwestern. Completed to Eldora in 1905, it was reorganized in

1900 as the DB&W. At that time it ran from Boulder to Eldora, 33 miles, and Sunset to Ward, 13 miles. It was abandoned shortly after the World War.

M. J., Baltimore.—The Baltimore, Pittsburgh & Chicago was organized in 1872 by the Baltimore & Ohio to finish the line to Pittsburgh. In 1877 it became known as the Baltimore & Ohio & Chicago, but it was really a part of the B&O all the time and was never a separate operating company.

A. F. VanB.—The Orange & Alexandria was chartered in 1848, and in 1859 it merged with the Manassas Gap RR (chartered in 1850) and the Lynchburg & Danville to form the Washington City, Virginia Midland & Great Southern, now part of the Southern Ry. System.

WHAT is the shortest rail route between Chicago and the West Coast?—L. O.

That of the Milwaukee Road to Seattle, 2,188 miles. Next is the Burlington-Great Northern to Seattle, 2,196 miles. Then (believe it or not) comes the C&NW—Soo Line—Canadian Pacific route to Vancouver, 2,201 miles. Fourth is the Santa Fe to Los Angeles, 2,228 miles.

WHAT roads were exempted from the Interstate Commerce Commission order to reduce coach passenger fares to not more than two cents a mile?

(2) *What roads merged to form the Burlington-Rock Island?*—H. D.

(1) Among the several lines exempted were the Magma Arizona, which still charges 6c; the Calif. Western RR & Navigation Co., 5c; the Rio Grande Southern, 5c; the San Luis Valley Southern, 4.5c; the Tennessee & North Carolina, 3c; the narrow-gage lines of the Colorado & Southern, 2¾ to 4c; and the Norfolk Southern, which gets 2½c on the Virginia Beach Division. The Tonopah & Goldfield, we believe, charges 3c a mile.

(2) None that we know of. It was incorporated in 1902 as the Trinity & Brazos Valley, and it adopted its present title in 1930, probably as a result of its joint ownership by the Rock Island and the Colorado & Southern (part of the Burlington System).

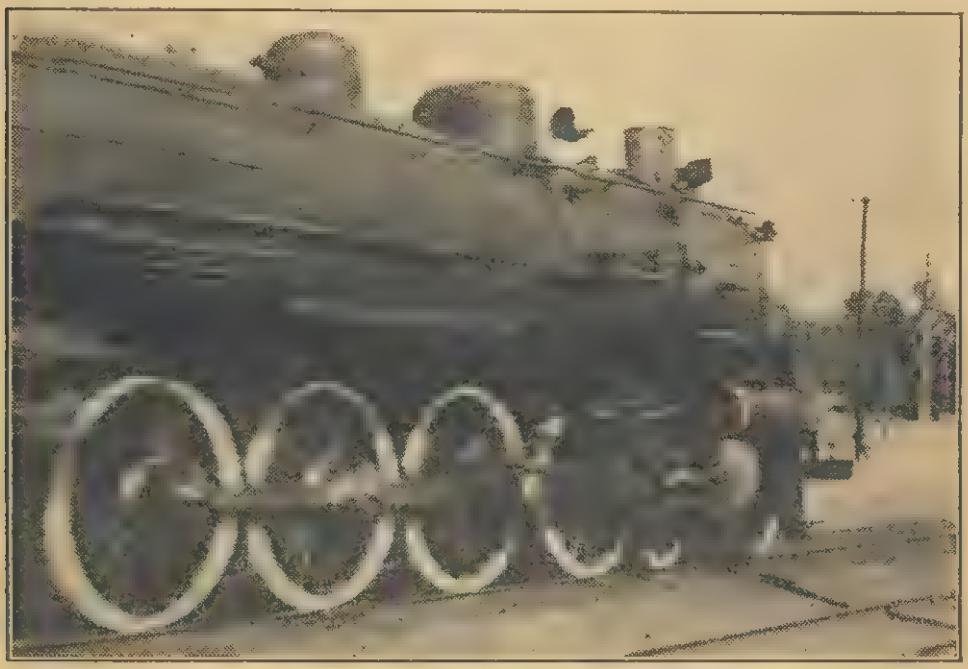


Photo by A. Parsons, 6328 Cedar St., Huntington Park, Calif.

We've Spent a Lot of Time Explaining How the Bottom of a Wheel Stands Still and How the Top Moves at Twice the Speed of the Vehicle It Carries, but Here's One of the Neatest Practical Proofs of the Idea That We've Ever Seen. The Bottoms of the Drivers on This Southern Pacific 4-8-2 Type Are Always Standing Still at the Point Where the Wheel Touches the Rail, and Hence Are in Clear Focus; Whereas the Tops Are Moving Twice the Speed of the Engine, and Hence Are Even More Blurred Than the Engine Itself

Photos from R. P. Middlebrook, 2744 Columbia St., San Diego, Calif.

The Same Train at the Same Place with the Same Engineer—Thirty Years Later! The Upper Photo Shows the Santa Fe's Coast Passenger Train at Sycamore Canyon, Just North of Oceanside, Calif., in 1905, with Engineer L. A. Litterer in the Cab of No. 436. The Lower One Shows the Same Train at Precisely the Same Place in 1935, with Engineer Litterer Handling the 3725. Senior Engineer on the Los Angeles Division, Mr. Litterer Was Retired a Year Ago

W. G., New Hartford, N. Y.—The New Haven owns a controlling interest (slightly more than 50% of the stock) in the New York, Ontario & Western. The last data available on the Lackawanna shows no group or company as having a clear control over it. The New York Central, the Vanderbilt family and the Baker family account for about 25% of its stock.

(2) Last year's net railway operating income (before fixed charges were taken care of) was $3,587,608 for the Lackawanna, and $1,360,560 for the NYO&W. No data is available on the Unadilla Valley.

Only a small percentage of the Lackawanna's revenues was due to milk and cream haulage. However, these commodities were responsible for $550,000 of the NYO&W'S $9,389,831 gross operating revenues last year.

E. T. M.—According to Chas. E. Fisher, president of the Railway & Locomotive Historical Society, the Vulcan Locomotive Works, which operated in Wilkes-Barre, Pa., was established about 1848. For the most part it manufactured mining, contracting and similar narrow-gage engines; so far as we can determine, it never turned out a standard-gage locomotive for a common carrier.

(2) You can compile a list of all the 2-foot gage lines which ran in America yourself by referring to back copies of the *Official Guide*, on file in large public libraries. Go through the index (in the older editions the gage of the road is printed right after the name) of at least one issue a year in all the editions available, and you can assemble a list which will be as complete as any in existence.

WORKING out the tractive force of Santa Fe engine No. 5000 (2-10-4 type) according to the generally accepted formula for simple two-cylinder engines, I get 113,000 lbs. According to the builder's and railroad's figures, 93,000 lbs. is right. How do you account for the discrepancy? —D. B., Pasadena, Calif.

You didn't make any mistakes in your figuring process, but you did fail to take into account the fact that Santa Fe No. 5000 is equipped with 60% maximum cutoff (meaning that the valves can never be worked at more than 60% full stroke), in which case the formula uses not .85, but only .68 of the working steam pressure. If the engine were equipped with auxiliary ports (for starting heavy trains, etc.) the figure .77 would be used.

W. H., Philadelphia.—The Northampton & Bath, which operates between Northampton and Bath Jct., Pa., 7 miles, and which has 12 miles of track, two oil-electric engines, and 230 cars, was chartered in 1902 and opened in 1904. Previously it owned at least three steam engines: Nos. 3 and 21 (0-6-0), and No. 28 (2-8-0), photos of which are obtainable from C. J. Regensburger, 2145 N. 3d St., Philadelphia. We have been unable to get their specifications.

T. H., Salisbury, N. C.—The old Bonlee & Western, which was organized in 1908 and which ran between Bonlee and Bennett, N. C., 11 miles, had one locomotive and one car. It was abandoned in 1928.

The Dover & Southbound, 24 miles long, which had two locomotives and two cars and operated out of Dover, N. C., is now abandoned.

The Pigeon River RR was incorporated in 1906 and leased to the Tennessee & North Carolina Ry. until 1926. It ran from West Canton to Sunburst, N. C., 12 miles, and suspended operations in 1931.

The Townsville RR was incorporated in 1919 to acquire the Roanoke River Ry., sold that year. It ran from Manson to Townsville, N. C., 11 miles, had one locomotive. It was abandoned in 1933.

The old 3-ft. gage Surry, Sussex & Southampton was incorporated in 1886, was 80 miles long, had 14 locomotives and 53 cars. Its headquarters were at Dendron, Va. At the time it was discontinued a few years ago it ran from Scotland, on the James River, to Dory, Va.

WHAT does the letter "X" before the numbers on some cars mean?—D. D., N. Y. City.

It generally designates the equipment as being in the service of the company; i.e., not for revenue use.

HOW many good strong horses could a NYC Hudson type engine actually outpull in a tug-of-war?—J. F., Greenville, O.

Until the day that somebody herds together a couple thousand good horses and hitches them to a good Hudson type engine and really performs the experiment, your query will never be answered satisfactorily. In the first place, although very few horses can develop one horsepower over a very long period of time, a horse can exert a great deal more momentary effort than a machine with a one horsepower rating can. As for the locomotive, its horsepower development is highest when it is pulling its heaviest load at its best practical speed. To predict the outcome of an

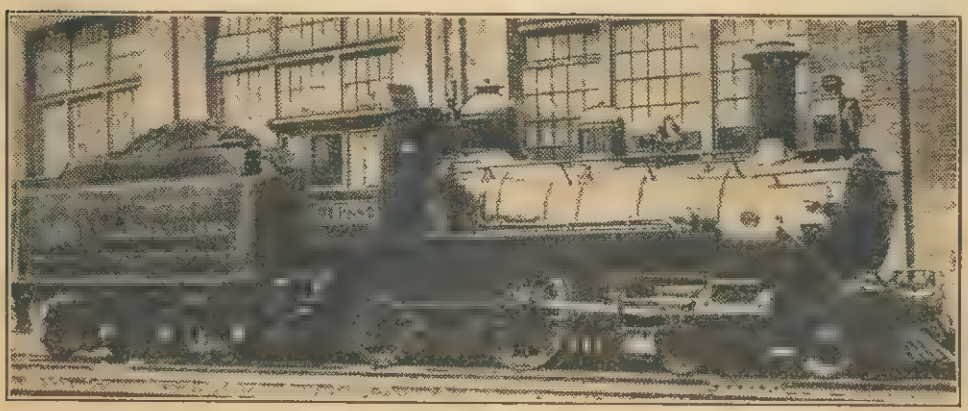


Photo from R. C. Schmid, 266 Maitland Ave., West Englewood, N. J.

American Railroads Have Never Gone in Much for Using More Than Four Digits in Their Locomotive Numbers. One of the Few Exceptions Was Pennsylvania No. 10233, Class D-8a. Built at the Altoona Shops in 1887, She Was Originally Pittsburgh, Fort Wayne & Chicago No. 202, Then PRR No. 9233, and Finally 10233. Photo Made in Ft. Wayne, Ind., in 1912

The Latest Thing in Burlington Motive Power Twenty Years Ago: (Upper) No. 5330, Mikado Type, and (Lower) No. 2969, Still the Heaviest Pacific Type on the Road. See Page 87 for Roster of Burlington Locomotives

imaginary tug-of-war, therefore, we can't pay too much attention to the horsepower rating of either the engine or horses. About the nearest we can come to an answer is to figure that the Hudson type, with a drawbar pull of around 50,000 lbs. (with booster), can outpull 1,000 horses averaging 50 lbs. drawbar pull apiece. Whether this is too low or too high for a horse we're not sure; but in view of the fact that a drawbar pull of 50 lbs. will move at least seven tons of good railway equipment on level track, it seems like a fair theoretical figure.

Additions and Comments

WHEN, on page 80 of our July, '36, issue, we surmised that the Canadian Pacific's 832-mile stretch between Winnipeg and Calgary represented North America's longest single locomotive run, we didn't know what we were letting ourselves in for. The first day the issue came out we got a letter on the subject, and we've been getting them ever since. Out of the pile we've culled the following items which should increase your knowledge of the subject.

Hall G. Williamson, C&IM general agent at Dallas, Texas, declares that the 3400 series (4-6-4 type) of the Santa Fe regularly haul trains Nos. 5 and 6 (the *Ranger*) from Kansas City to Galveston, 972 miles, without change. So far, that has everything backed off the map. Next are the runs of the Northern Pacific's 4-8-4 types between Missoula, Mont., and Jamestown, N. D., 904 miles without change (called to our attention by L. C. Robillard of Grafton, N. D.), and of the Milwaukee's 4-6-4 types run between Minneapolis and Harlowton, Mont., 914 miles (the subject of a card from Martin Dignan of Youngstown, O.). And Mr. Williamson also reminds us of the SP operating its 4300 series engines between El Paso and Los Angeles, 887 miles, without disconnecting 'em. On this run, he adds, the engine crew of the *Golden State Limited* handle the train from Tucson to Yuma via Phoenix, 295 miles, without change—which, it seems to us, is one of the longest engine crew runs we've ever heard of.

But before we haul up, we'll tell you about one more claim which bothers us. John Cannon of Minneapolis believes that the honor of having the longest locomotive run should go to the Soo Line, whose 4000 series (4-8-2) haul the *Mountaineer* from Minneapolis to Portal, N. D., and back, 1,122 miles, with only a turn-around and necessary servicing at Portal. For practical purposes this is a through run. But if we allowed it, the Canadian Pacific men could claim the record for their engines, since they are merely turned and serviced at Calgary, and by the same reasoning make a through run of 1,664 miles.

* * *

In our July issue we also tried to think of roads in the United States whose engines are equipped with the Canadian-style vestibule cabs; but, as you know, we weren't too successful. Several readers helped us out with reminders that many other American engines are so equipped, among them being the 4-8-2 and 4-8-4 types of the Wabash, the 2-10-4 types of the Central Vermont, the 3000 series of the Boston & Maine, and the *Lord* and *Lady Baltimore* of the B&O.

Thanks to H. A. Kaiser, Elwin Heath, H. E. Hall, O. K. McKnight, and Earle Boyd.

In answering CSH in the same issue, we stated that the Delaware, Lackawanna, Schuylkill & Susquehanna was the predecessor of the Lehigh Valley. It should have been Delaware, Lehigh, Schuylkill & Susquehanna, says T. E. Weiler of Port Morris, N. J. We agree; let's call it a typographical error.

As in the happy days of the iron horse, a lot of books about the Diesel engine are being published. One of the latest, on the order of Forney's old *Catechism of the Locomotive*, is Audel's *Diesel Engine Manual*, a small 300-page illustrated volume which answers a lot of important and interesting questions about Diesel engines. More or less a handbook for engineers and operating men, it is for that very reason helpful and interesting to anyone else who cares about increasing his knowledge of Diesel power. It is published by the Theo. Audel Co., 49 W. 23d St., New York City, and it sells for $2.

The World's Highest Standard-Gage Pike

DUE to the genius of Henry Meiggs, a New York contractor, Peru can boast of having the world's highest standard-gage pike. The Ferrocarril del Peru, running from Lima to Huancayo, reaches a height of 15,685 feet above sea level. In its construction, beginning 1869, Meiggs faced countless difficulties. The engineers protested he could never span the gigantic gullies. But Meiggs said: "Even if we have to hang the tracks up on balloons, we'll do it." Through the great mountains some 60 bridges were erected and 65 tunnels were bored. At Chaupichaca bridge one can still look down and see the remains of an engine that came to grief during construction. Several Americans lost their lives when this engine ran into a derrick.

When the Verrugas, or "bridge of warts," was being built, the laborers died from a species of internal warts caused by the bite of a fly found in the crevices of the rocks in that gully. This bridge was at one time the third highest in the world, 252 feet above the valley. That section for a radius of 30 miles is unsafe to live in, but there is no danger to passengers using the railroad.

Before making a journey over this pike, however, passengers must be sure their heart and lungs are sound. Normally, the only complaint is a mountain sickness known as "soroche," caused by rarity of the air. It is worse than sea-sickness.

When the Lima-Ancon branch was built, Peru pictured a locomotive on one of her postage stamps. Today a copy of the stamp, unused, is worth $8. This branch was opened for traffic in 1870. During the Pacific War with Chile it was destroyed and later rebuilt. In 1879 a war broke out between Peru and Chile, and the construction job was suspended until 1890, when the Peruvian Corp., Ltd., resumed the work of building the railroad, Meiggs having died in the meantime. The world's highest passenger station is on this pike: Galera, altitude of 15,673 feet.

Between 1925 and '28 Peru showed a train on semi-postal stamps, commemorating Tacna and Arica. From 1873 to 1883 Chile was at war with Peru and Boliva for possession of the rich nitrate beds on the Peruvian and Bolivian coasts. Chile won, and in the treaty received a ten-year occupation of Tacna and Arica. However, after the ten years, the ownership was to be decided by a plebiscite. This vote was never taken, so Peru called attention to the fact with these semi-postal stamps. The stamps were not used in the two disputed districts, as they were under Chilean rule, but the money received from the stamp sale was to pay for the plebiscite, if it were taken. Peru made a settlement with Chile over these two districts in 1929. After that the stamps were no longer used.

In 1904 Chile ended a truce of 20 years with Bolivia. Part of the treaty called for building a free-transit railroad from the port of Arica to La Paz. This pike, shown on the stamps, was built and opened for traffic Aug. 6, 1912.—Robert White.

A FAMOUS RAILROAD FAN

by Stookie Allen

BILL ROBINSON WAS BORN IN A TWO-ROOM LOG CABIN ON A PLANTATION NEAR MEMPHIS, TENN., 52 YEARS AGO. THE SON OF A CONFEDERATE WAR VETERAN, HIS BOYHOOD AMBITION WAS TO BE A RAILROAD CONDUCTOR WITH SHINY BRASS BUTTONS AND A GOLD BRAIDED CAP. FATE SAID "NO."

BILL WAS THRIFTY AND RESOURCEFUL. HE CAPITALIZED ON FLOODS, FIRES, STORMS AND OTHER DISASTERS. BY RECLAIMING SOAKED AND SCORCHED BALES OF COTTON HE DEVELOPED A BUSINESS OF A MILLION DOLLARS A YEAR.

WILLIAM W. ROBINSON

TODAY HE IS HEAD OF McCALLUM & ROBINSON, INC., MEMPHIS, WITH A 15-ACRE PLANT AND 20 BUILDINGS. IT IS SAID TO BE THE WORLD'S LARGEST COTTON PICKERY AND MOP FACTORY. BILL HAS NEVER OUTGROWN HIS DESIRE TO BE A RAILROAD MAN.

TRUE, HE SHOOTS A LOT OF FREIGHT BUSINESS ALONG THE IRON TRAIL. THAT WASN'T ENOUGH. HE WANTED TO FEEL THAT HE WAS RIDING A TRAIN, SO HE BUILT A RECEPTION ROOM LIKE A PULLMAN CLUB CAR, COMPLETE EVEN TO THE OBSERVATION PLATFORM. IN IT HE HUNG A LOCOMOTIVE BELL. THIS ROOM IS BILL'S HOBBY, THE PARTIAL REALIZATION OF HIS BOYHOOD DREAM.

Boomer Ink-Slinger

By FRED HASKELL

His Beautiful Calligraphy Was a Labor of Love—in More Ways Than One!

"NAPPY" HENDRICKS finished writing a report. Then he laid his pen on the desk, leaned back, and sighed with satisfaction. It wasn't the totals on the sheet which pleased him so much, nor the fact that this item was at last complete. Ah, no! What caused him to glow with pride was the beautiful calligraphy, the copperplate script that decorated it.

Nappy slung a mean fist. His penmanship was good—much too good, in fact. Because of it he had started out years ago with the carnival crowd. This, in turn, had led to his becoming a boomer ink-slinger and brass-pounder on one pike after another, thus sidetracking him from a more stable career such as hotel manager or wholesale coal dealer.

Lady Luck had been with Nappy the day he unloaded from an empty boxcar on the Central Railroad here at Treadway. Agent Ingram was in need of a penman with Nappy's long experience. A near-by oil strike had boosted freight business to such an extent that the company authorized additional help

for the agent; and Nappy Hendricks, meeting all requirements, carrying half a dozen service letters, and being on the spot, had fallen heir to the job of utility man or clerical roustabout.

The Treadway wire had been moved from the agent's office to the new tower at the interchange junction. Consequently, Nappy had no brass-pounding to do, his entire time being devoted to routine office work. And enjoyable work it was to Nappy, for, requiring much use of pen and ink, it afforded opportunity to exercise his ornamental stylographics.

But in a town as small as Treadway, there is no excitement on Sundays—and Sundays, Nappy found, were dull days, indeed. There was little to do but hang around the office and read the big city papers bought from the news-butch on the morning local.

So it happened that one Sunday in August, to kill time that promised to hang heavy, the boomer clerk rode the local to Greystone. Now, Greystone was division headquarters and a hustling, good-sized town. Nappy dropped into the dispatcher's office to meet and chin with such of the boys as might be on hand.

"Cranky" Opdyke, local freight agent, was among the Sabbath loafers present, and after the gabfest he invited Nappy to dinner. Cranky was a bachelor and lived at Mrs. Hempstead's boarding-house.

"Just wait until you wrap yourself around one of Mrs. Hempstead's dinners!" he promised Nappy. "It'll spoil you for ordinary cooking. Why, say—all the drummers that happen to lay over in Greystone on week-ends pass up the hotels and restaurants to eat there. Boy, what meals!"

"That so? How about the grub on week-days?"

"Great! Best in town. But Sunday dinner is always something to write home about. You'll see."

Cranky had not exaggerated. It was quite true. Nappy enjoyed a meal such as hadn't been set before him in years. The widow's table was famous for miles up and down the line. Not only commercial travelers, but also many unmarried rails were in the habit of deadheading long distances to partake of Mrs. Hempstead's Sabbath dinner and the big pow-wow which always followed on porch and in parlor.

NAPPY met the widow. Mrs. Hempstead was about his own age—which was not young. She was buxom and jolly, and Nappy took an instant liking to her.

The way she held her head slightly to one side when, at the head of her table, she listened to her boarders' joshing; the quizzical light in her brown eyes as she groped for repartee; the deep wave in her hair—these, and certain other mannerisms gave Nappy's heart a stimulating and unexpected fill-up. What a delightful and wholly desirable woman!

The boomer ink-slinger knew his dames. He'd been around plenty of them in his day—saucy blondes and redheads in the hash-houses from Vancouver to the Mex border; girl ops who were wizards at the key and sounder, and not averse to stepping out on a starlit night with a fancy-free boomer; five-and-ten-cent-store salesgirls wise in the ways of the world; and even female hobos, tough, able to take care of themselves, amazingly human once you get to know them.

Yes, there were plenty of skirts in Boomer Hendricks' checkered career, but not until now had he met a woman that made him want to marry and set-

tle down. He was glad, therefore, when Cranky excused himself to keep an afternoon appointment and left immediately after dinner.

"You might as well spend the afternoon here," the freight agent suggested, "and listen to the boys shoot off their faces. That is, if you haven't anything else to do. They're the worst bunch of liars in seven states."

They shook hands and Cranky departed. But Nappy, with Mrs. Hempstead on his mind, had no yen for palaver, however friendly; and soon he withdrew to one end of the porch where he could be alone to think.

Why hadn't he, Nappy asked himself, married when he was young and worked up to a good steady job as station agent in some nice community, instead of a roving pen-pusher and operator on two dozen roads?

That was the sort of life a man should lead. Like, for example, Agent Ingram of Treadway. No great accomplishment, to be sure, but a solid and satisfactory career. And that, Nappy decided, would be his own program from now on.

Home guard. That was it. No more high flying when his pockets were full. Stick to the job and be satisfied with steady, if slow, promotion.

His position at Treadway wasn't much to brag about, but it *was* steady —and this time he'd stay with it. If only he had met a woman like Abigail Hempstead some years earlier. But even now, hope whispered, it might not be too late.

Thus he sat on the broad veranda, ruminating as the long summer afternoon passed and the shadows began lengthening toward the east. Fragrance of honeysuckle blown across the grassy lawn made life seem sweet indeed.

He thought of his office. Old-fashioned but mighty pleasant. For some reason, headquarters had never felt it necessary to equip the Treadway agency with a typewriter. All clerical work there was done by hand. Expense bills on inbound freight were made with pencil and carbon paper; waybills for outbound freight were made with copying ink and its counterpart, the good old copy press.

His hand had always been steady enough for any practical use of the pen, and now with the constant practice he was getting at Treadway, his penmanship, Nappy thought, was as good as at any time in his youth.

How glad he was that the office contained no typewriter! One could type waybills the day long, and, on viewing the result of his labor when the day ended, experience not the slightest feeling of accomplishment.

But what a sense of satisfaction—of released creative force—of fulfillment—came when he beheld a single waybill which with pen, ink, and finely shaded flourish he had just made out for, say, ten cases of canned beans! It made a great difference.

These thoughts raced through Nappy's brain while he was sitting on Mrs. Hempstead's front porch after that first glorious Sunday dinner.

The return local would soon be leaving, so Nappy sought out the widow, complimented her on the excellent meal, thanked her for the pleasant afternoon, and left.

IN the following week some corrections arrived from Opdyke's office, calling for additional prepay on several shipments which Nappy had billed to Greystone for destinations beyond, and which Opdyke's office had in turn rebilled to connecting lines.

Ordinarily such a matter would be handled in regular routine, but this time Nappy suggested to Ingram that he, Nappy, run down to Greystone the following Sunday and discuss personally the question of rates on which the two offices did not agree.

Ingram seemed surprised.

"Cranky's office will be closed," he objected. "Besides, Cranky wouldn't know anything about this. It was handled by one of his clerks."

"Oh, well, I can loaf around town for the afternoon, anyhow," answered Nappy. "Things are pretty dull here."

"Yeah. I guess that's what's really biting you. Go ahead, if you want to."

Nappy bought some blank cards at the print shop and spent the evening writing calling cards with the inscription, "Abigail Hempstead."

"The best one yet," he told himself, surveying with pride the card just finished. "She ought to like these."

It was, from two angles, a labor of love. With his most ornate scrolls and curlycues he experimentally wrote a few reading, "Abigail Hendricks," and decided that the change in name was a vast improvement. Then he hastily tore them to little pieces.

On Sunday he arrived at Mrs. Hempstead's, to learn that Cranky was away on a week-end fishing trip. This pleased him mightily. The matter of additional prepay could wait.

"How nice of you!" exclaimed the widow when he gave her the cards, as soon as he could find her alone after dinner. "And you made these yourself?"

"Uh, huh—just to kill time."

"It must have been a lot of trouble." The widow was both surprised and gratified. "I hardly know how to thank you."

"Don't bother," said Nappy. "It wasn't any trouble at all. I like to do it. Anyway, I felt I owed you something more for the wonderful dinner last Sunday. You ought to charge more, you know."

"Well, really!" There was an appreciative light in her eyes as she guardedly surveyed him.

Nappy, smoothly shaven and well dressed, was quite unlike the recent arrival at Treadway. The executive type, Abigail decided. Probably accustomed to handling weighty business matters. She hoped, she said, that he would stay for supper.

"If I did, I'd miss the local," said the clerk ruefully. "So I guess I'd better not. Have to get back tonight, you know." A flash of inspiration struck him. "Still—er, maybe—that is, guess I could take the Flyer back at midnight."

"Why, *of course* you could!" Abigail enthused. "Please stay."

NAPPY stayed. More than that, he stayed each Sunday night thereafter, taking her to evening church services—or, rather, reluctantly letting her take him.

And for the first time in his life Nappy took to writing love letters. The expression of sentiment contained sweet lies fully as much in his beautiful and eye-filling script as in the equally flowery text. Some of the letters he embellished with doves and Cupids, going completely mushy. The doves bore ribbons streaming from their beaks with the words, "I Love You," which from an artistic standpoint were amazingly quaint.

Thus the affair progressed rapidly. One night, walking home from church in the moonlight, Nappy, at first haltingly, then with a rush, told the divine creature of his love.

". . . . and I thought you might—er, maybe you could— Do you care enough to marry me, Abigail?"

"Why—why, yes, Nap, dear," said the lady. "I think—why, yes."

In the shadow of an acacia tree, he folded her in his arms. A rush of emotion filled his soul with ecstasy.

They did not make public their betrothal, as a period of mild debate and not so mild argument followed. Though the widow was all for getting married at once, the ceremony should not take place, Nappy maintained, until he could get transferred in some capacity to Greystone.

"I don't want to be a week-end husband only," he explained.

"But you don't know when that will be, dear. It might be months—years, maybe."

"I know," he admitted sadly, "but I can't see it any other way."

"Well, do you have to work for the Central Railroad?" Abigail persisted. "Isn't there something else you could do in Greystone?"

"Not any more," said the ink-slinger. "Railroading's all I know."

Abigail smiled patronizingly.

"Well, honey, I—I've been thinking for a long time that this big house is getting to be too much for me. It's wearing me out. I thought if I could get a manager—a man to, er—well, I really need a man to do lots of things around the house. Don't you think you could—"

"Just a minute, Abigail," he said. "If you mean you'd want me to come here and live on your boarding-house earnings, you evidently don't know me as well as I thought you did. I'm no gigolo."

"Oh, don't be silly," the widow simpered. "I didn't mean it that way. But I really need someone to look after things while I run the kitchen and dining-room."

"Well, I'm no janitor or housemaid," said Nappy. "I'm a railroad man."

"Sure you are, dear. But I thought later we might get a little hotel downtown and you could manage it."

"Abigail, I'm too old to start learning the hotel business," said the boomer, "and besides I wouldn't like it. Now, suppose you just be content until—oh, gosh!"

Tears had begun flowing down the angel's cheeks. "Nap, you—you don't love me any more. You don't really want to marry me."

Nappy was distressed.

"Oh, good gosh, honey! Don't say that!" He held her close. "Of course, I want to marry you. You know I love you."

"Well, then," sniffling, "why don't you move over here to Greystone and look after my house for me? We could be very . . ."

AND thus it went, over and over. The same arguments repeated, followed by moments of consolation and assurances of affection.

Nappy forgot the time until a sudden thought caused him to glance at his watch, which told him that he had missed the Flyer. His only other chance to get home by morning was to take No. 35, a drag freight; so down to the yard he went, and rode to Treadway in the caboose.

An hour out, the conductor offered him coffee and sandwiches but Nappy refused, curling up for some shut-eye instead. He awoke sometime later to find the skipper and rear shack in the cupola. The night being sticky, he stepped out on the rear platform for a lungful of fresh air.

They were just pulling into Blenholm, slowing to a crawl. Nappy, leaning against the wall, was lulled by the rhythmic clicking of wheels on rail-joints. Suddenly he saw a flickering red glare beneath a long, low building erected on a foundation of pilings at one side of the right-of-way.

"Fire!" Yelling a warning to the men inside the caboose, Nappy swung from the slowly moving train and ran to the burning building, which happened to be the paint storehouse of the Central Railroad.

Peering beneath the building, the floor of which was about waist-high, he saw two 'boes on their knees frantically attempting to beat out the blaze with empty sacks which they had been using for bedding.

Nappy sensed that the 'boes had accidentally started the fire, which had not as yet spread beyond a small area, but knew the flames must soon eat through to the building's interior.

He wormed his way under to help, but at sight of him the 'boes dropped their sacks, scrambled to the other side of the building, and took to their heels in the darkness.

Realizing that his unaided efforts would be futile, Nappy crawled out to go for help. Thirty-five was backing down the main, and sent out front and rear flags as she stopped.

The conductor hammered on the door of the section foreman's quarters farther down the track, rousing that worthy. In a few minutes the section boss reached the fire with several of his gang, nightshirts stuffed in trousers, some with shoes on, others in slippers.

The foreman, knowing the lay of the land, had no trouble in finding the hose-coils on the walls in the darkness, and quickly had a stream of water playing on the fire. The flames were extinguished before any real damage was done. Thirty-five resumed her journey with little loss of time.

Nappy was given a nice write-up in the next issue of the *Central Railroad Employees' Bulletin.* His detecting the fire had, it seemed, saved several thousand dollars' worth of real estate, paint and varnish.

The division brass hats wanted to reward him in some manner, but their chance didn't come until the assistant agent at Greystone resigned to enter the hay-and-grain business. They proffered Nappy the job at once.

NAPPY HENDRICKS was sitting pretty. He and Abigail could marry. A few months ago, a boomer on his uppers. Now promotion, position, a future, love, marriage, a home—all the things he wanted from life—were being tossed into his lap at one swoop. The widow was ecstatic. It wouldn't be long now!

"Yes," said Cranky Opdyke, when the fire hero came down to talk over the matter with him, "I'm sure we'll get along together famously. The boys may call me 'Cranky'—but I don't believe you'll find me so."

"I'm not worrying about that part," said Nappy with a grin. "We'll get along all right. And this would be my desk?" He laid one hand on a smart-looking bit of furniture.

"Sure," Cranky replied. "This is it. Right here's where you'll hold forth from now on. Nice layout, the office—don't you think?"

Nappy looked around. "First rate. And what is that row of desks over there?" pointing to one end of the office.

"Billing department. Fast bunch of boys I have here, too. They knock

'em out, hell for breakfast." Then, smilingly: "You'll find this quite a change from the Treadway job, I imagine. You won't have to do any billing. Just sit up front, look wise, and see that the office runs smoothly. Everything is modern and up-to-date. You could hunt from cellar to roof and not find a copy press."

An invisible force smote the boomer who was now a home guard. No billing for him to do! No copy press and damp rags with which to work magic!

Never again could he experience the joyful sense of mastery which always came when he set before him a pad of blank waybills and prepared to inscribe thereon his ornate Spencerian embellishments! Forever lost to the world his chirographean gift, his delicate shading, his copy-ink artistry—his all!

A sense of utter futility pervaded him. Then, suddenly, his spine stiffened.

"Sorry, Cranky," he said. "Very sorry. It's a swell job and all that, but I guess it's no go."

"Whatsa matter?" asked Cranky.

"Oh, nothing."

Nappy reached for a pen and toyed with it a moment, inscribing some fancy curlycues on the face of an envelope.

"No copy press, eh? Everything modern and up-to-date?" He looked out the window, where a white dusty road stretched away as far as eye could see. "You boys are too fast for me, Cranky. I'm just an old boomer ink-slinger."

He picked up his hat and headed for the door.

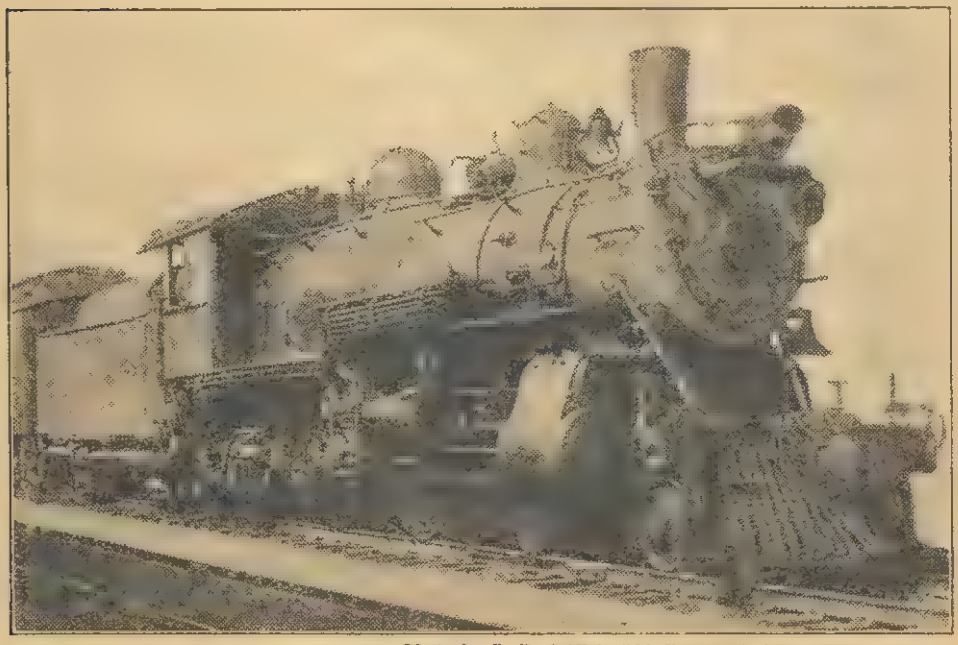


Photo by L. E. Griffith, 738 Hammond Ave., Aurora, Ill.

No. 2580, One of the Burlington's Atlantic Types (See Next Page), Hauling a Local Train at Aurora, Ill.

Locomotives of the Chicago, Burlington & Quincy

THE Chicago, Burlington & Quincy was incorporated in 1849 as the Aurora Branch RR, which name was changed to Chicago & Aurora in 1852 and to the present title in 1855. After that it expanded swiftly, and in 1901 was itself acquired jointly by the GN and NP, which still own it. It is in good financial shape; although operating revenues are little more than half of 1920's, it is managing to clear a few millions after all charges. The following roster of its engines, which does not include those of its subsidiary, the Colorado & Southern (acquired by it in 1908), was supplied by the mechanical department of the road, and was checked and approved by H. H. Urbach, mechanical assistant to the executive vice-president. Photos are printed on pages 77, 86, 88 and 89.

Class	Numbers	Number of Engines in Service	Cylinder Dimensions (Inches)	Driver Diameters (Inches)	Boiler Pressure (Pounds)	Tractive Force (Pounds)	Weight without Tender (Pounds)	Builder and Date Built
Ten-wheeler (4-6-0) Type—74 Engines								
K-1	608-627	6	19x24	64	160	18,400	121,400	Rogers, Baldwin, 1891-2
K-2	630-666	31	19x24	64	180	20,700	128,550	Various, 1892-96
K-4	700-723	20	19x26	64	200	25,000	156,600	Co. shops, 1900-04
K-10	950-968	17	19x26	64	200	24,900	161,000	Various, 1900-1914
Atlantic (4-4-2) Type—34 Engines								
P-5	2550-2574	20	21x26	78	210	26,200	194,800	Baldwin, 1902-05
P-6	2580-2585	14	21x26	69	210	29,610	194,800	Baldwin, Rogers, 1903-5
P-6a	2590-2597							
Prairie (2-6-2) Type—107 Engines								
R-4, R-4a	1907-2039	33	25x28	69	185	39,900	210,000	Baldwin, Alco, 1904-06
R-5, R-5a	2050-2222	74	22x28	69	200	33,100	216,000	Baldwin, Alco, 1906-07
Consolidation (2-8-0) Type—5 Engines								
D-4a	3114-3170	4	22x28	57	200	40,400	202,600	Alco, 1902-03
D-4b	3188	1	22x28	57	200	40,400	200,000	Baldwin, 1903
Pacific (4-6-2) Type—119 Engines								
S-1, S-1a	2800-2867	57	24x28	74	200	37,000	243,000	Baldwin, 1906-09
S-2, S-2a	2900-2949	40	24x28	74	200	37,000	243,000	Baldwin, 1910
S-3, S-3a	2950-2974	22	27x28	74	200	46,800	278,600	Baldwin, 1915-18
Hudson (4-6-4) Type—13 Engines								
S-4	3000-3012	13	25x28	78	250	47,700	391,800	Baldwin, 1930; No. 3012 in Co. shops last year
(These engines exert 59,400 lbs. t.f. with booster)								
Mogul (2-6-0) Type—19 Engines								
H-4	1220-1262	19	19x26	64	200	24,900	143,500	Various, 1899-1900

These Three Engines, Nos. 3000, 6325, and 5601, Represent the Burlington's Largest and Heaviest Types; and No. 3000 (Top) Represents the Largest and Heaviest Group of Hudson Types in Service on Any Railroad

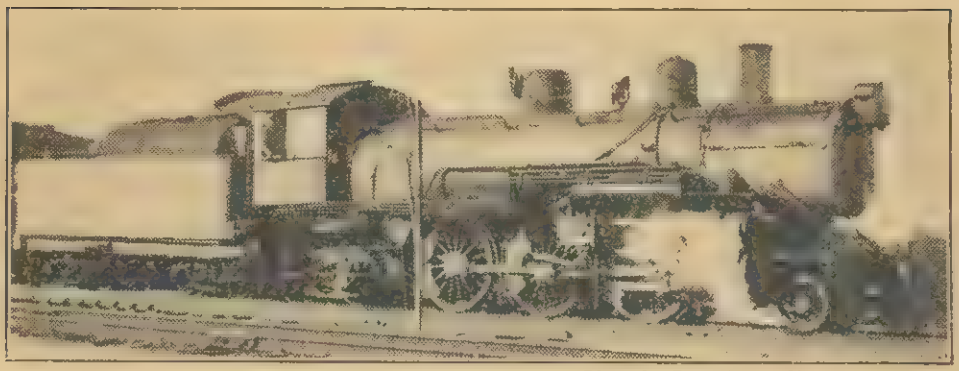


Photo by R. Andrews, Chariton, Iowa

No. 1949, Prairie Type, Snapped at Chariton, Iowa, Three Years Ago

Mountain (4-8-2) Type—21 Engines

B-1	7000-7007	8	27x30	74	210	52,750	350,000	Lima, 1922
B-1a	7008-7020	13	27x30	74	210	52,750	367,700	Baldwin, 1925

Northern (4-8-4) Type—8 Engines

O-5	5600-5607	8	28x30	74	250	67,500	461,600	Baldwin, 1930

(These engines exert 80,500 lbs. t. f. with booster)

Mikado (2-8-2) Type—336 Engines

O-1	5000-5059	49	27x30	64	200	58,090	270,600	Baldwin, 1910
O-1a	4940-4999, 5060-5147	148	27x30	64	200	58,090	272,300	Baldwin, 1917-23
O-2	5200-5299	9	28x32	64	180	60,000	310,000	Baldwin, 1912
O-2a	5200-5299	44	28x32	64	200	66,640	334,200	Baldwin, 1912
O-2b	5200-5299	11						
O-3	5300-5359	60	28x32	64	200	66,640	315,400	Baldwin, 1915-19
O-4	5500-5514	15	27x32	63	200	62,950	320,000	Baldwin, 1919

Santa Fe (2-10-2) Type—82 Engines

M-1	6001-6002	2	30x32	60	200	81,600	378,700	Baldwin, 1912
M-2	6100-6125	23	30x32	60	200	81,600	377,100	Baldwin, 1914
M-2a	6126-6170	47	30x32	60	200	81,600	379,500	Baldwin, 1915-21
M-3	6300-6309	10	30x32	63	200	77,710	394,600	Alco, 1919

Texas (2-10-4) Type—18 Engines

M-4	6310-6322	12	31x32	64	250	90,000	512,110	Baldwin, 1927
M-4a	6321-6327	6	28x32	64	250	83,300	497,700	Baldwin, 1929

Mallet (2-6-6-2) Type—6 Engines

T-2	4100-4108	6	23&35x32	64	200	70,500	379,650	Baldwin, 1910

Eight-wheel Switcher (0-8-0) Type—17 Engines

F-1	540-549	10	25x28	52	190	54,350	214,000	Alco, 1919
F-2	550-556	7	25x32	56	200	60,700	256,300	Converted from old Mallets in Co. shops in 1927, 28

Six-wheel Switcher (0-6-0) Type—183 Engines

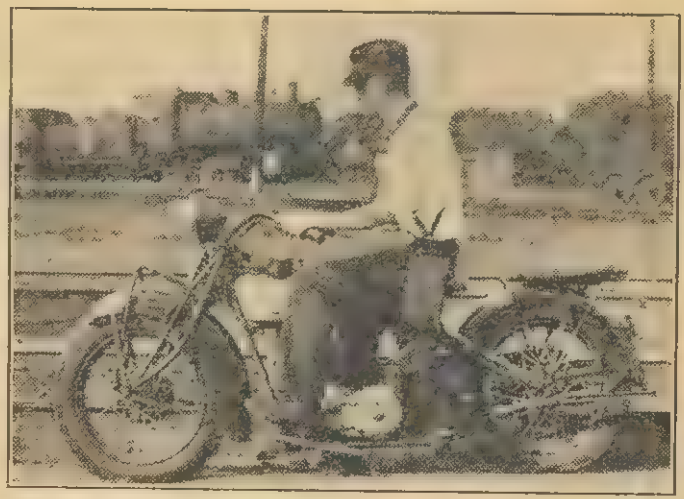
G-3	1429-1576	24	20x24	52	180	28,200	122,500	Co., 1900-09; Baldwin, 1910-13; Alco, 1919
G-4	1650-1668	2	20x24	52	180	28,200	110,100	
G-5	500-509	10	21x28	52	190	38,350	165,000	Alco, 1909
G-5a	510-524	15	21x28	52	190	38,350	165,000	Baldwin, 1921
G-6	1678-1699	16	21x26	52	180	33,700	147,700	Co. shops, 1905, 06
G-8	1710-1769	59	20x24	52	200	31,300	141,400	Converted from Prairie type, 1918-1925
G-9, G-9a	1817-1848	22	21x26	52	200	37,485	159,300, 160,000	Converted from Prairie type, 1926-28
G-10	560-594	35	22x28	52	200	44,300	185,200	Converted from Prairie type, 1929-1930

Diesel and Gas-Electric Switchers—6 Engines

100	(0-4-0 type)	1	—	—	—	16,000	60,000
9111	(0-4-1-0 type)	1	—	—	—	27,200	90,000
9120	(0-4-4-0 type)	1	—	—	—	38,100	120,000
9121-9123	(0-4-4-0 type)	3	—	—	—	39,600	132,000

International Engine Picture Club

HERE'S a member who has built up a large collection of engine pictures and photographs, believe it or not, by means of a motorcycle. His name is Robert Graham; he lives at 872 Union St., St. Paul, Minn.; and he's been collecting locomotive pictures for twenty years (he was born in 1906) and taking them almost ten. As for the motorcycle, it enables him to get around much faster than he could in either a street car or automobile, and thus get many times more photographs per week than he could otherwise.



With His Camera in Working Order and a Reserve Supply of Films in His Pack, Robert Graham Goes Forth to Photograph Engines on a Motorcycle

Already he has more than 6,500 different negatives on file; and he estimates his picture collection conservatively at around 27,000 items. It's getting so that he has to go a long ways from home for a picture, he says; in his pile of negatives is one of almost every engine that runs into St. Paul and Minneapolis.

Although he has always wanted to be an engineer, things didn't work out that way, and he became a draftsman. He develops and prints his own photos, all of which are uniformly excellent. In our April, 1935, issue, we printed a short article in which he described his photographic technique and explained the success he has achieved in his hobby.

* * *

MERLE ANDERSON, 7839 S. Michigan Ave., Chicago, Ill., has prints and negs. of eastern and Chi. roads to trade for sou., esp. IC.

L. C. AREND, 729 Front St., Franklin, O., collects, trades, buys or sells photos and negs. of n.g., short lines, old-timers and small power; p.c. size, 15 for $1.

* * *

R. C. BELL, 438 Clark St., Galesburg, Ill., is planning trip to Denver about Aug. 15th; will take engine pictures for small charge. Send stamp for details.

S. BLECHMAN, 132 Palmer Ave., Mamaroneck, N.Y., will trade 102-page New Haven emp. tt., Sept. '35, for recent Frisco emp. tt.; also 4 and 10 page supplements for best offer Frisco and Wabash engine snaps.

G. E. BLISS, Assiniboia, Sask., Canada, will buy CPR 4-4-0 and 2-6-0 engines built around 1890.

R. BOGARDUS, 9 Congress St., Hoosick Falls, N. Y., sells 116 size train photos, 10c. ea.; 5x7, 25c. ea. Send 3c. stamp for list.

B. C. BUSHNELL, 3349 W. 25th St., Cleveland, O., has p.c. negs. for sale or trade for same size; will buy small collection—send lists, sizes and prices.

R. H. BUETTNER, 270 Shady Ave., Pittsburgh, Pa., has PRR, B&O, P&LE, P&WVa, other negs to trade.

E. BROWN, 2502 Buena Vista, San Antonio, Tex., starting.

* * *

CALIF. & NEV. RR HISTORICAL SOCIETY, 915 Broadway, Oakland, Calif., wants to hear from persons caring to donate or loan material for its exhibition room. Later will have exhibition at U. of Calif.

C. CLEMENS, 1831 1st St., Bakersfield, Calif., will trade Santa Fe train orders for snaps or train orders.

J. B. CAIN, 1329 N. Irving Ave., Chicago, wants Dec. '28-Nov. '31; Jan-March, June-Sept. '32; and June '33 Railroad Stories. First send prices.

W. CLIFFORD, 220 Miami St., Buffalo, N. Y., has back Railroad Stories to trade for engine prints.

F. A. CLUTE, 1624 Ave. A., Schenectady, N. Y., has pamphlets containing photos of C&O, LV, Erie, NYC, MoP, UP, set of 6, $2.50; send stamp for list.

R. F. COLLINS, 26 Brickell Ave., Westwood, N. J., has 116 size Erie, NYC, Rdg., NYO&W and other eastern road photos to trade or sell;

send 3c. stamp for list and sample print, or trade list for list. Wants Erie "Mother Hubbards" or other older Erie types since 1900.

P. CORBIN, Box 74, New Market, Ia., has about 50 CB&Q 120 size negs. and 45 dif. roads' train orders for sale or trade for photos and model equipt.

A. H. COVERDALE, 1633-16 A St. E., Calgary, Alta., Canada, has 116 size CPR engine used in G. B. movie "The Great Divide," 10c. ea. Wants 116 or p.c. size CPR 5997 and 3300.

* * *

A. E. DENNIS, 63 Jackson Ave., Jersey City, N. J., buys B&M, MeC, CV, B&Aroostook, B&A, New Haven and other New England old and new roads; send lists.

N. DIMOCK, 8 Harvard St., Exeter, N. H., wants old engines and trains of B&M, MeC, Grand Trunk and Intercolonial; write first.

J. G. DONOVAN, 724 P St., Sacramento, Calif., has Railroad Stories, May '33 to date, to trade or sell.

W. DUNNAM, 911 Euclid Ave., Lynchburg, Va., buys Sou. RR loco prints.

W. EWALD, 88 Erb St. W., Waterloo, Ont., Canada, will trade CPR, Grand River and LE&N train orders for pub. tts. of small and aband. rys. Sells 1 Official Guide and 4 Can. Ry. Guides to highest bidders.

* * *

H. FAIRCHILD, 807 27th St., San Pedro, Calif., will trade dope (no. engines, cars, mileage) of any U. S. roads for 116 size print; also has many clippings to trade for same.

W. FITT, 1707 Acorn St., Muskegon, Mich., wants neg. or print of MR&NC engine No. 2, C&O caboose No. 602, side views PRR 3768 before and after streamlining, and others; has 116 size snaps of PM snow plow, and many GTW engines; first write. Wants to hear from other high school fans.

K. FOOTE, 1766 Fulton Ave., W. Vancouver, B. C., Canada, has CPR, CNR, GN 116 size engine prints to trade; negs. of some, 1 for 3 116 photos; 50 p.c. views of trains and locos of 5 countries to swap for others. What offer for a Wash. & Georgetown ticket?

L. E. FRENCH, 824 Bond Ave., E. St. Louis, Ill., will trade trolley and interurban equipt.

J. H. FRETZ, Box 365, Lansdale, Pa., has over 20 classes Rdg. engines and streamlined gas-elec. car. Wants 116 size Rdg. Mallet 2-10-2 and other negs.; send lists, or enclose stamp for list.

M. FYIE, Btry. D., Fort Russel, Marfa, Tex., will trade 3 SSW emp. tts. for prints.

* * *

L. GEDDES, 281 Albion, Houghton, Mich., has DSS&A 2-8-0, 4-6-0 and 4-6-2; Copper Range 2-6-0 and 2-8-0 types, 116 and p.c., 3 for 25c.; wants Ca. & Hecla 2-6-2T and 2-6-0.

C. GLASS, 77 Flowers Ave., Pittsburgh (7), Pa., wants B&O engines, esp. "President."

B. G. GOSSE, 90 4th Ave. W., North Bay, Ont., Canada, offers pictures of Dionne Quintuplets and Dr. Dafoe for engine prints all countries; also curios.

F. J. GOLDSMITH, Jr., 930 St. Nicholas Ave., N. Y. City, has over 1500 prints, mostly trolleys and small steam roads, 10c. ea., 3 for 25c. Also many 116 size negs., 20c. ea., of many N. Y. trolleys such as FJ&G, BRT, M&SC and loco and pas. cars of D&N, Dexter & N, L&BR, Schoharie Valley, M&S, N&StL, Grasse River RR, others.

F. S. GRAHAM, Bennington, Vt., will trade p.c. DL&W for Rdg.

L. GREEN, 112 W. 42nd St., N. Y. City, will buy 2½x3¼ and larger negs. of U. S. and foreign human interest, scenic winter or summer RR views; first write enclosing contact print of negs.

* * *

F. E. HANNAH, Box 558, Commerce, Tex., has 900 builders' engine prints, '22 Loco. Cyclopedia and other RR literature for sale.

G. HARDY, 915 Broadway, Calif., will pay top price for loco boiler plates, Baldwin Loco Mags. before '27 and builders' catalogs.

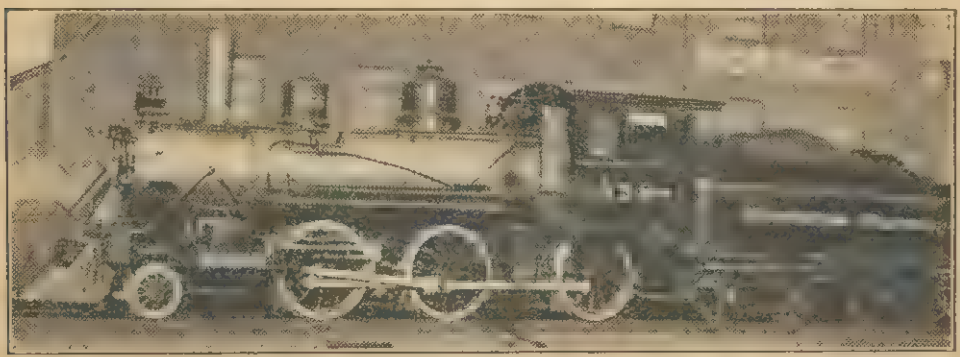
T. HARVEY, 1700 N. Main St., Salisbury, N. C., has 116 size Sou., YD&W, A&Y, Monon, HPRA&S and many others to trade for short lines same size; also wants histories, rosters, etc. Sends free train order for 3c stamp.

J. W. HAWKINS, Jr., 1299 37th St., Brooklyn, N. Y., has B&O, CNJ, NYC, PRR and New Haven 116 size photos to sell or trade for any locos or rolling stock.

J. HAXTON, 500 E. Walnut Lane, Phila., Pa.,

READERS who collect, buy, sell, exchange, or make pictures of locomotives, trains, cars, etc., are listed here as members of the International Engine Picture Club. There are no fees, no dues. Names are published in good faith, without guarantee.

A membership button is given FREE to those who send in a "Readers' Choice" coupon (page 143) and self-addressed stamped envelope. (If you live in Canada or any foreign land, enclose a loose 3c stamp from your own country instead of the envelope.) Address Engine Picture Editor, "Railroad Stories," 280 Broadway, New York City. Tell him what you want or what you offer.



One of Robert Graham's Most Recent Photographs: Northern Pacific 558, an Old Mogul Type, All Dolled Up After What Was Probably Her Last Visit to the Back Shops

has '35 Railroad Stories for what have you; also 25 other copies.

H. HEIDEL, 511 W. Broadway St., Freeport, Ill., has Burlington and Milwaukee motive power to trade; also buys prints and negs.

S. W. HENDERSON, 1045 23 Ave. S. E., Minneapolis, Minn., has many 116 size photos of N. W. roads, 35 for $1.

E. HEROLD, 213 Emerson St., E. E., Pittsburgh, Pa., has P&LE, P&WVa, PRR and B&O negs. and photos for trade; send your lists. Also swaps train orders and clearances.

S. E. HERRING, 715 N. Madriver St., Bellefontaine, O., interested in interurban photos and tables, esp. old Ohio lines; also Ohio steam roads such as CH&D, W&LE, AC&Y. Trades Loco. Journals, Big 4 emp. tts. and train orders.

C. V. HOLLAND, Teachey, N. C., will buy or trade train orders, clearance cards all roads; also wants 1 photo ea. latest pass. and freight engines on A1 roads.

J. F. HOLLISTER, 40 Kingswood Rd., Toronto, Ont., Canada, has large engine picture collection for sale: snaps and negs. of CPR, CNR, AA, Wabash, "Royal Scot," etc.; also builders' photos of these roads and some old-timers. Railroad Stories, Sept. '31 to Dec. '33, some previous issues.

F. H. HUBBARD, Editor, R.R. Stories, 280 Broadway, N. Y. City, wants Dec. '33 issue to complete his file, in exchange for 3 more recent issues. Write first.

* * *

R. INNES, 838 W. 24th St., New York, N. Y., trades tts. with other 14-yr. old boys.

W. JANKE, 4524 N. E. 9 Ave., Portland, Ore., sells 116 size engines or trains running into Portland, 10c. ea. Also supplies NP train order for 3c. stamp.

R. P. JONES, 16 Terrace St., Lakewood, N. Y., buys 116 negs.; send lists. Will pay 25c. for 116 neg. of Erie 3313.

T. JONES, 12 S. Maryland Ave., Port Washington, N. Y., wants emp. tts., RR books, maps and loco snaps.

* * *

E. KASEMAN, Jr., Wheelerville, Pa., has 116 size S&NY locos, 10c. ea.

O. R. KENYON, 530 East 4th St., Wilmington, Del., trades PRR 1035 negs. for Nos. 2, 3, 7, 8, 530 and 1046.

H. KNICKLEBINE, 1212 Franklin Ave., Rochester, Ind., wants Nickel Plate engine photos and roster.

F. KUBLY, 1213 21st Ave., Monroe, Wis., specializes in p.c. or 116 size C&NW, Milwaukee, CB&Q and Soo Line.

* * *

G. LARSEN, 1868 McIlwraith St., Muskegon, Mich., starting; wants U. S. lists.

F. W. LIANG, 4236 University Ave., San Diego, Calif., inspects and makes minor adjustments on I.E.P.C. members' cameras in vicinity; also gives help with picture problems, for 3c. stamp.

H. LOFGREN, 2449 Collins St., Blue Island, Ill., will buy circus train and c.t. wreck photos.

* * *

R. F. MAHLA, 433 Kansas Ave., Lorain, O., starting; wants all roads; has few Nickel Plate and Lake Shore Electric.

R. W. MAIER, 57 Fargo St., Boston, Mass., interested in German, Austrian and English locos.

J. H. McANDREWS, 54 Jefferson St., Brooklyn, N. Y., has large collection of Erie, DL&W, PRR, LI, LV, Rdg., B&O, Rahway Valley, NYC, New Haven and CNJ; wants to hear from N.Y. and N.J. enginemen.

W. McLUCAS, Jr., Tire Hill, Pa., wants PRR pictures.

P. MICHAELS, 1222 W. Rankin St., Flint, Mich., answers queries on Grand Trunk equipt. for 3c. stamp.

A. MILLER, 2079 Hoyt Ave., Fort Lee, N. J., has July '33 to date Railroad Stories to trade for any RR maps; first write.

W. MILLER, 1776 Greenwich St., San Francisco, Calif., has S.F. trolley transfers to trade for other cities.

W. J. MILLER, 14950 Mendota Ave., Detroit, Mich., has many 116 size prints and negs.; send 10c. and stamp for list and sample print. Also trades with foreign fans.

A. D. MOEN, 196 S. 24th St., Salem, Ore., will trade 450 engine pictures for a .22 cal. Balt, or pump repeater with clips, or Woodsman's automatic pistol. Also trades 2 albums of 130 prints for field glasses or telescope over 10 power.

W. MONTGOMERY, 7810 Michener St., Phila., Pa., has PRR Rule Book and PRR booklet on boat trip from Jersey City to W. Point, 1887, to swap for RR prints or elec. car tts. or passes.

E. MORGAN, 108 8th St., Cordele, Ga., collects RR scenes; wants negs.

M. MORRONE, 849 N. Avers Ave., Chicago, has 2½x5½ Milwaukee motive power and 2¼x3¼ C&NW prints to trade for Sou., NYC, Santa Fe, CPR, SP and NP.

B. MURRAY, 839 Halsey St., Brooklyn, N. Y., will sell Baldwin Loco Mags., Apr. '34-Jan. '36, for best offer or trade for pass. fare tariffs or will buy same.

E. M. MYERS, 225-31 105 Ave., Queens Village, L. I., N. Y., starting engine collection.

* * *

J. NANSEN, 305 S. Franklin, New Ulm, Minn., wants streamliner and D&RGW Mallet prints.

A. NEUSSER, 31-30 94 St., Jackson Heights, L. I., N. Y., will trade 3 engine and train prints for 1 neg., either 116 or 122.

M. E. NORRELL, Cheyney, Del. Co., Pa., has many 40-yr. old tts.: Wil. & Nor., Morgantown & Kingwood, FE&MW, etc., to highest bidder; list for stamped envelope.

* * *

R. PHELPS, 1319 24th St., Ogden, Utah, has index in alphabetical order of titles of all true tales, stories, articles, poems, etc. in Railroad Stories from Dec. '29; separate index for each year. Will sell or trade for photos or other RR material.

K. PRATT, Bloomfield Sta., P.E.I., Canada, wants phonograph records of "Casey Jones" and "Billy Richard's Last Ride," sung by Vernon Dalhart; first write price.

W. M. PRATT, 544 Crescent Rd., Calgary, Alta., Canada, has CPR engines; wants to hear from other members.

S. PRESCOTT, 70 Pleasant St., Rockland, Me., has 116 size MeC, B&M, New Haven and other photos to sell or trade for old MeC prints; send stamp for list.

* * *

G. RANDO, 424 N. Bellenger St., Herkimer, N. Y., has 40 engine prints 116 size and Engr. and Fireman's Handbook (val. $5). What offer?

L. REDMOND, 145-36 21 Ave., Whitestone, N. Y., starting collection of engine photos and pub. and emp. tts.

R. REED, 452 11th St., Niagara Falls, N. Y., will buy old abandoned loco prints; first write.

T. S. REED, Box 426, New Haven, Ind., will send 1 NKP forms "17" train order for 3c. stamp.

G. E. REUTER, 103 Spring Ave., Bergenfield, N. J., wants 116 size side view negs. of NYC 5900's.

E. C. RIEP, 1302 Noyes St., Utica, N. Y., has circus train prints, 10c. ea.

A. L. RICE, 4217 Osage Ave., Phila., Pa., wants '30, '31, '32 Jan., Feb., Apr.-June, Oct.-Dec. '33; Jan., Apr., Oct.-Dec. '34; Mar., Aug. '35 and Jan. '36 Railroad Stories; first write offers.

J. RIPA, 3334 Bronxwood Ave., Bronx, N. Y. City, has New Haven electrics and cars and N.Y.C. trolleys.

J. J. ROURKE, 85 Warren St., Newton Centre, Mass., has B&M negs. to trade for CA&S and B&A, G-5w, G-6e, K-a and K-d class negs. F. Sankoff, write.

W. RUSSELL, 404 N. Broom St., Wilmington, Del., will buy or trade for 116 size negs. of PRR classes B-6s, D-16sb, E-3sd, E-5s, E-7s, H-6sa, H-8sc, K-3s, K-5, others; esp. wants to hear from those on Eastern, Panhandle, Conemaugh, Erie and Ashtabula Divs.

R. SANDERS, 329 N. Fetterly, Los Angeles,

Photo from Collection of L. D. Webster

Engine No. 118 Bucking the Drifts on the Old New York & Pennsylvania, Recently Abandoned

Calif., starting; wants to hear from other beginners and RR employees.

C. D. SAVAGE, 2829 N.E. Hancock St., Portland, Ore., has Ore., Calif. and Utah interurbans, trade or sell.

W. O. SCHAEFER, 369 Highland St., Pasadena, Calif., has 116 size SF, SP, UP and PE to trade for photos of U.S. n.g., short lines, trolleys and feature trains; send lists and samples.

E. SCHNEIDER, 3344 Ft. Independance St., Bronx, N. Y. C., has NYC photos.

E. A. SHERMAN, Box 75, Deerfield, Mass., has many U.S. and Canadian emp. tts. for sale or trade; also B&M train orders for others.

A. P. SMELSER, Sun City, Kan., wants negs. of Santa Fe "Superchief" and "The Chief"; also B&O calendar picture "Capitol Ltd. in Historic Potomac Valley" and Bureau of Pub. Rel. calendar showing different modes of travel. Will frame NYC and PRR calendar pictures, $2 ea.

E. H. SPRANGERS, 2550 W. Seltzer St., Phila., Pa., has PRR calendars for '31, '32, '33 and '35, 50c. ea. in money order, plus 10c. for postage; also Baldwin Loco. Mag. for July-Oct. '33, $1.

P. STRINGHAM, 303 Lydia Ave., Peoria, Ill., is seling steam and elec. collection of 1200 prints, mostly p.c. and 5x7 (no 8x10), mounted in albums; enclose 3c. stamp with your queries.

C. R. SWEZEY, 795 Briarwood Ave., Bridgeport, Conn., starting; wants to hear from local members.

* * *

F. W. THIBODEAU, 3016 Wyandot St., Denver, Colo., wants Colo. Mid. engines.

W. B. THOM, 201 W. 78th St., N. Y. City, wants pictures of "Ptarmigan," "San Juan" and other D&RG n.g. pass. engines with names, except "Montezuma."

R. THOMPSON, Jr., Rainy River, Ont., Canada, wants May, '33 Railroad Stories.

P. TURANICA, Box 54, Danielsville, Pa., wants book of RR songs with words and music.

* * *

A. F. VAN BLOM, Jr., 3024 Homan Ave., Waco, Tex., has local electric and steam lines.

W. VENNE, 625 Division St., Lake Charles, La., starting engine picture collection; wants to hear from fans drawing locos.

E. WACHSER, 259 High St., R. 1, Box 66, Perth Amboy, N. J., beginning engine picture and neg. collection.

H. WALHOUT, 304 Myrtle Ave., Muskegon, Mich., collects 116 size PM engines.

J. P. WALSH, 505 W. 144 St., N. Y. City, has trolley transfers and Jan. '32 to date Railroad Stories to trade for engine pictures, train orders or what have you.

F. WARREN, Elm Road, S. Chelmsford, Mass., has Feb. '30, Dec. '31 and '32, Aug. '32, Mar. Nov. '33 and Oct. '35 and Dec. '35 Railroad Stories; blue prints of SAL, B&O, T&P, C&NW locos; 35 dif. U. S. pub. tts. and 10 large action photos of foreign elec. and steam engines—all this to swap for Mallets photos or heavy power action shots of freights in mountains, wrecks and snow fighting scenes; enclose 3c. for list or will swap list for list.

J. WHITAKER, Box 32, Lance Creek, Wyo., has many loco clippings, 3c. ea., or trade for photos; wants Railway Age since Dec. '35. H. Fairchild, write.

C. W. WITBECK, Box 522, Brookhaven, Miss., has 112 size photos of many small roads in La., Miss., Ark., Tex. to trade for IC only; IC fans write.

H. WOLTERS, 128 Chestnut St., E. Orange, N. J., has 116 size of modern frt., pass. power to sell or trade, side views only. Official Guide for best offer; foreign equipt. requested.

C. E. WOOD, 748 Hood Ave., Shinnston, W. Va., has 116 size B&O 7304, 2942, gas-elec. 6043 and NYC 5279 to trade for other locos.

C. W. YINGLING, 316 E. Falls St., Ithaca, N. Y., wants to hear from local RR and trolley fans in view of forming chapter of N.R.H.S.

Construction

Seaboard Air Line, from Plains, Fla., southwest, 10 miles.

Abandonments

Maine Central, Rumford to Oquossoc, Me., 36 miles; and Austin Jct. to Kineo, 51 miles. Marianna & Blountstown, Blountstown to Scots Ferry, Fla., 14 miles.

A Dame's Place Was at Home, Swore Old Bender Johnson, and Not in a Telegraph Office on

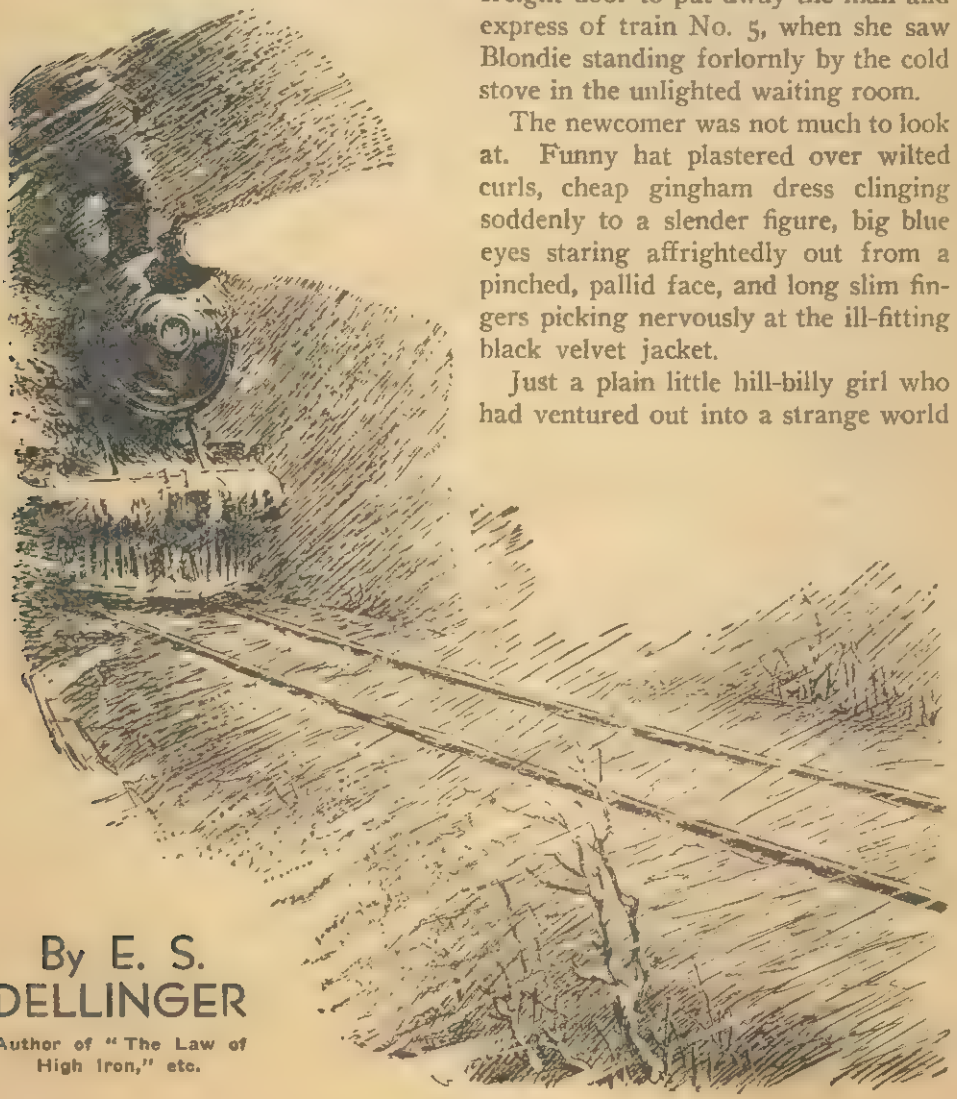
The Graveyard Trick

IT was raining the night "Blondie" came to the graveyard trick at the desolate mountain town of Creeping Shadows, on the Gulf Lines railroad system. Blondie was the new telegraph operator. The *graveyard trick* was, of course, the third shift; it included midnight and the quiet hours of early morning.

"Redhot" Frost, working the second trick, came through to open the freight door to put away the mail and express of train No. 5, when she saw Blondie standing forlornly by the cold stove in the unlighted waiting room.

The newcomer was not much to look at. Funny hat plastered over wilted curls, cheap gingham dress clinging soddenly to a slender figure, big blue eyes staring affrightedly out from a pinched, pallid face, and long slim fingers picking nervously at the ill-fitting black velvet jacket.

Just a plain little hill-billy girl who had ventured out into a strange world



By E. S. DELLINGER

Author of "The Law of High Iron," etc.

and was deathly afraid she would never find her way around.

The second-trick girl was tempted to laugh, Blondie looked so odd and out of place around a railroad; but big drops which were not rain trickling past the corners of a sensitive mouth restrained her.

Letting the skeleton frame lantern drop down to hide her emotion, Redhot inquired:

"New graveyard trick?"

"Sir—I mean—ma'am?"

"Are you the new third-trick operator?"

"Oh! Yes— Yes!" Blondie smiled a helpless, pathetic smile. "You see, the business college sent me down from Springfield—"

"I'm Virginia Frost, Redhot for short," interrupted the older girl, who was red-headed and hazel-eyed. "I've been holding second trick in this bullfrog pasture for nearly a month."

"I'm Zanie Barr," the other confided. "They nicknamed me Blondie up at the college. I'm scared stiff I'll never be able to do the work."

"Know anything about railroading?"

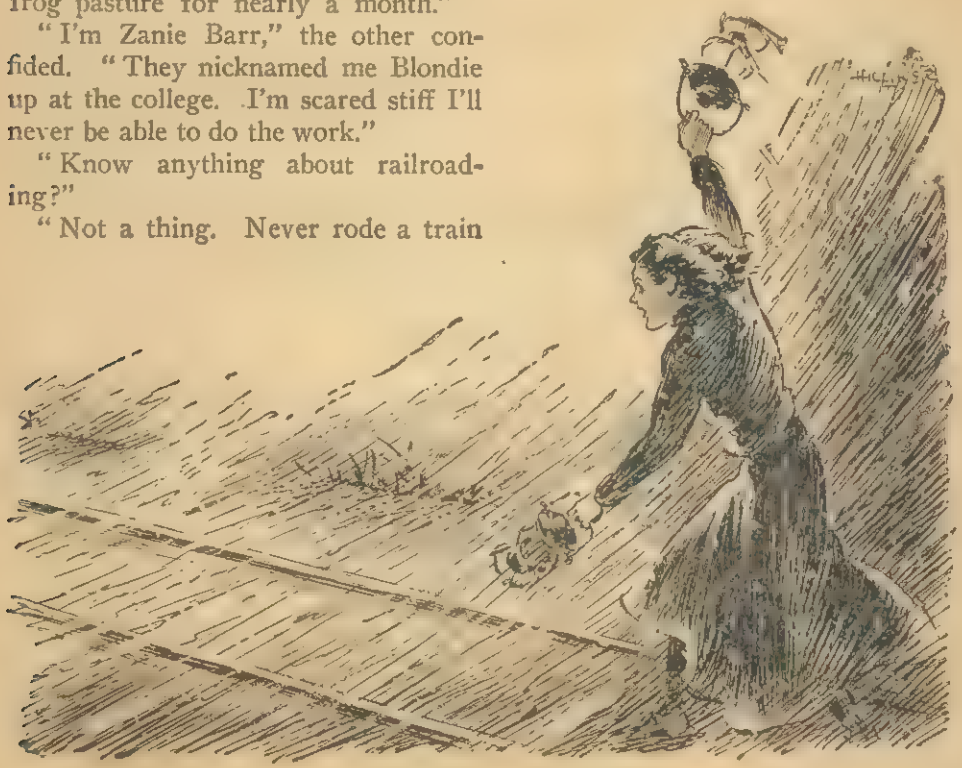
"Not a thing. Never rode a train till I went to Springfield in June."

Without comment, Redhot went wheeling trucks of mail and express into the freight room.

It was September, 1917. War had called men to handle wires behind the trenches. Girls, fired with patriotic zeal or eager to get out into the world and do things, were rushing into business college, grabbing a few weeks' training in telegraphy and station work, and rushing out again to man the keys left vacant by enlistment and the draft.

Redhot had been born under the smoke screen of a railroad terminal. She had grown up tomboying around her father's caboose, hopping boxcars, wiping lanterns on executed train orders, and teaching student brakemen to chain up drawbars and pack hot boxes.

Naturally a girl of her type fitted



immediately into the scheme. For others, it was a madcap adventure which often ended disastrously, both to the girl and the company which employed her.

Even with her rail background, Redhot had not found a clear track and no slow orders, because railroading on the Creeping Shadows cutoff had always been a man's job. Men had run trains in that rugged mountain country, tamped ties, fought outlaws, and issued train orders.

Redhot was the first woman to work one of those jobs; and though she was Conductor Jack Frost's daughter and knew her way around, the men resented her. Old Jack himself did not approve too strongly, and other men were grumbling about "this here Gulf Line hirin' female railroaders."

Redhot knew that the new girl was headed for trouble. Blondie seemed to sense it, too.

"I don't know what in the world my family will ever do if I don't stick," she confided. "Pappy died last spring, an' left Mom with six children. The draft got my oldest brother. Mom sold the cow an' some chickens to get money for my expenses, an' now if I don't make good—"

"You will," Redhot encouraged. "You're going to find it tough, but you can stiffen your backbone and stay with it. I'll help you all I can."

THE helping began that night and lasted until another night nearly Christmas. The graveyard trick at Creeping Shadows carried its share of drudgery—filing orders, copying waybills, checking the yards. Redhot went carefully over the details of each task; and Blondie, who was as bright as she was timid, indicated that she understood perfectly.

"It's the orders I'm afraid of," she admitted. "I'm scared I'll make a mistake an' cause some awful accident—"

"Forget it, kid," said the conductor's daughter. "When you start being afraid, that's when you're apt to slip. Just watch your step, don't go to sleep on the job, don't let anybody put anything over on you, and you'll be all right."

When they had finished filing orders and copying bills, the girls sat at the table. Across the bridge in the town of Creeping Shadows dogs were howling dismally. In the river behind the station bullfrogs sang their mournful, incessant chorus.

Blondie shuddered. "It's gonna be awful lonesome in this spooky station," she said; but Redhot answered: "There's nothing in the world to be afraid of."

Lightning held target practice among pine and cedar on the high hillsides. Thunder rattled the windows and jarred the pot-bellied stove. Rain pelted shingles, while water played taps through the galvanized pipe leading down to the boardwalk.

The girls listened to the storm, to the click and clatter of instruments busy with the chatter of gossiping wires. At 11.05 the dispatcher called "CS" and gave the signal "19 south copy three."

On the Gulf Lines, the Gould system of delivering orders was in use. The normal position of the order board was *clear*. When the operator had orders to deliver, he set it at *stop*. This signal, as usual, consisted of two semaphore arms with their colored disks on a high pole over the office. They were controlled by levers in the instrument table in the bay window, the right lever controlling the southbound board, the left, the northbound.

Redhot pulled the right lever, turned to Blondie with the admonition: "This is one chore you don't want ever to forget, kid—putting out your board when you've got orders to deliver."

"That's what the teacher told us at the college. She said if we did—"

As the dispatcher rattled off the symbols, Redhot filled in the form:

Order No. 176. To C & F exa 912 south. Exa 912 south meet 1st No. 86 Eng 963 at Wilton. Has right over 2nd No. 86, Eng unknown to Blaisdell.

There was no rush. The extra was far up the hill. Redhot clipped the neatly folded orders with their clearances into two hoops, one for the engineer, one for the conductor. Then she hung the hoops over the latch on the semaphore lever, buttoned her raincoat and cleaned the lantern globe.

AT 11.30, the whistle rang through the rain. Redhot took the hoops and went to stand under the eaves. Blondie went with her.

"I wanta watch you hand up those orders," said the hill-billy girl. "I never handed up one on the fly, an' I never seen many handed up."

"There's a lot of things to watch for," Redhot told her. "If you get too close to the track and the cylinder head hits you, it's good-by Blondie. If you stand too far back, the brakeman will miss the hoop."

The newcomer was listening, wide-eyed.

Redhot went on: "If you don't hold the hoop tight enough, the wind from the train will suck it out of your hand. If you hold it too tight, you'll break it or pull a man off the train and make him into mince meat. If you hold your light in front of your hoop, the man can't see it. If you get it too high, he's liable to pick up you and your lamp instead of the order; if you don't hold it high enough, he can't see."

"There's a lot to watch, ain't there?" Blondie said seriously.

"Yes," the other girl replied. "If the man misses the hoop, the hoghead will have to stop the train. He'll give you a genuine good bawling out and write you up, and you'll get a mess of brownies—"

"Men don't really bawl you out, do they?"

"I'll say they do!"

"But," said the hill-billy, "I've never been used to bein' bawled out by a man."

"Unless I miss my guess, you're going to get used to it."

Blondie looked scared.

Redhot continued: "Listen, sister, you ain't a lady now. You're just a female railroad man. These old boys down here ain't going to fall in love with you because you wear skirts instead of overalls. You're working on a job that requires you to do certain things right. When you do them, you'll be in the clear. When you don't, you're going to get told so you'll remember."

Redhot was not trying to frighten a student. Far from it. Her companion's helplessness and need had aroused sympathy. That was one thing.

Then the attitude of the men when Redhot had come on the job had nettled her, had aroused her fighting spirit. The conductor's daughter decided to show the hard-boiled outfit that men didn't have a monopoly on brains and railroad ability. She knew the way was going to be hard, but she was determined that Blondie must not fail.

Although she had doubled three

nights straight—had worked her own trick and the graveyard—Redhot did not go home when her time was up at midnight. Blondie was not yet ready to be left alone.

Redhot made up a fire in the office stove and dozed beside it. The new op studied the division timecard, checked back through the order files, and listened to the chatter of the wires.

At 1.50 the dispatcher called Blondie to take her first order. Redhot snapped awake and came to stand behind her. The hill-billy was shaking like a leaf, but set determinedly to work.

She put out her board. She hesitated for a second which lever to pull, started to pull the wrong one, changed quickly to the other, pulled it back and set it in its notch.

The dispatcher was urging her to hurry. Trembling fingers copied:

Order No. 104. To C & F 1st No. 86 at Creeping Shadows. No. 9 eng 601 wait at Moon Valley until 3.47 for 1st No. 86 eng 963.

Blondie started repeating. Train No. 86 should be showing any minute now. If she stopped it, the train would not be able to go up the hill on the time given.

Although in practice she had been sending as rapidly as Redhot herself could send, the new girl made three mistakes in repeating her first order. The headlight of the engine was glowing through the trees when she finished.

REDHOT watched anxiously through the south window. She knew by the whistle that Bender Johnson was engineer on No. 86. Bender was a good rail but he was a rawhider. He had talked loudly and not kindly about "female railroad men" at the time Redhot started on the job.

When he came in sight of the order board, Bender began calling for a signal. *Wha-wha-wha-wha* his whistle rang out. *Wha-wha-wha-wha*—a succession of four short blasts.

"Wink your board at him!" the older girl cried. "Bring him up the main line. Don't let him head in. If he does, he's stuck here for Number Nine. Here—let me do it!"

Redhot sprang around the table and grabbed the semaphore lever. She dropped the arm, lifted it, dropped it and lifted it, thus winking the board in signal to the engineer to come up the main line instead of heading in.

Bender Johnson was on his toes. Before she had the signal set back to position, he was answering. A second later the heavy boom of his exhaust was battering down the whisper of the rain which had almost ceased falling.

Blondie caught up the lantern and hoops and ran to the platform. She was white as a sheet and trembling, scared half to death because she was going to hand up her first train order.

"Take it easy, kid," Redhot advised with a friendly smile. "You've got lots of time. Remember what I told you. Don't get too close. Don't hold the hoop too tight. Hold your lantern on the right side, the north side. Watch him and the hoop. Hang it on his arm, and for gosh sake, *don't let him miss it!*"

The hill-billy girl was in position by the time the engine crossed the south switch. She had the hoop and lantern up.

Bender Johnson came on at forty miles an hour. He was making a run for Creeping Shadows hill. He did not ease off for the timid op standing beside the track. Probably he thought it was Redhot, and figured she knew how to hand up a train order.

The brakeman came out of the gangway and down to the bottom step. Both women could see his lantern clearly. He was taking no chances on making a high catch.

Redhot was standing a few feet behind Blondie. She watched the position of the hoop, knew it was too high for the bottom step. She shouted: "Hold it a little lower. Just above your head."

If Blondie heard, she did not heed. The engine was hurtling toward her at forty miles an hour. The exhaust was ripping the night, the bell ringing, the earth trembling as if the mountains were falling. Never in her life had she stood close up to the track with a train roaring by at such speed.

A blind terror seemed to grip her. Without realizing it, she shrank back from the track. The conductor's daughter watched anxiously, fearing that if she shouted again Blondie would dash into the path of the oncoming engine. She came up close, called soothingly: "Stay here, kid. Don't get back farther. He'll miss it if you do."

Blondie raised the hoop another six inches. The pilot bar shot by a scant two feet from her shoulder. The hot breath from the cylinder head swept over her, engulfed and dazed her.

BENDER JOHNSON was leaning from his cab window. The brakeman was reaching out and down, groping for a hoop he could not see. Blondie moved it—where? How? She was too excited to know.

Wind from the train caught the hoop. Blondie felt the touch, thought the brakeman had it. She turned it loose. The brakeman grabbed for it, but his arm hooked thin air.

Redhot knew he had missed it. She *sensed* rather than *saw* it bound into the track to be crushed by rolling wheels.

The brakeman uttered an angry shout. Bender Johnson sloughed his air and went up the line talking. The girls could not hear, but Redhot knew he was talking about female railroaders and wasn't calling them ladies.

Blondie stumbled out from the track. She was crying and her lantern was out.

"I was afraid," she almost sobbed. "I lost my head when the engine came by me."

"No use crying, kid." Redhot laid an arm about the trembling shoulder. "Come into the office and tell the dispatcher. They'll have to stay here now for Number Nine, and Bender Johnson will be in before he goes."

They returned to the office. The conductor and the head brakeman came by and read the news. Train No. 86 pulled up and backed in. The dispatcher cancelled the order to No. 9 at Black Mountain; and though he did not say over the wire what he was thinking, Redhot was aware by the hammer of the key that his thoughts had not been born in heaven.

She tried to console Blondie, assured her that all operators had to learn.

When Bender Johnson had the train put away, he came to the office. He was a blustering red-faced hogger in his middle forties. It was whispered in youth he had been a Beau Brummel, but youth was gone. Ignoring the new girl, he confronted Redhot.

"Ain't you ever goin' to learn how to hand up a train order?" he bellowed.

"I may," she answered saucily.

"Well, damn it all, I'm goin' to start right here teachin' you. You call a

man up the main line for an order, and then hold the hoop clear outside the right-of-way, and when the brakeman starts to reach for it, throw it at him—"

"She didn't do it, sir!" blubbered the younger girl. "I—"

Bender whirled on her.

"Who'n blazes are you?" he roared.

"I'm—the—the new third trick."

"What? Another female . . ." And Bender Johnson was off on a wild tirade, telling the world what he thought about any dame that would go traipsin' around a telegraph office at night, tryin' to do a man's work, instead of stayin' home where she belonged and lookin' after a house and a passel of kids.

"Some night one of you girls is goin' to overlook your hand and cause a million-dollar wreck," he predicted, almost hoping it would happen and thus prove his point.

BLONDIE was crying bitterly. Redhot was sitting on the table swinging a shapely foot encased in a rubber boot. She was eying Bender hostilely. When he got just that far, she interrupted with:

"You never made any mistakes, did you, Bender? Never had to learn the game? You're one of those smart boys that was a natural-born railroader, knew the rule book when you was a baby and stepped right up and showed the hoghead how to run the first engine you ever saw?"

"I never—"

"Naw, *you* never! You never ran all over the roundhouse the day you hired out here lookin' for a *tadpole hammer* to drive spikes in a frog." Redhot grinned at the recollection of it. "You never went to the store room and asked for a quart of red lantern oil. You never mis-read your watch and went battin' down through Wilton into the face of Number Six, already due, the night Dad pulled the air on you. That wasn't *you*. That was somebody else."

Bender was squirming and twisting and backing toward the closed door. Conductor "Fatty" Simpson winked at Blondie and the brakeman and shouted:

"Sic 'em, Red! Give it to 'im!"

"You're darn right I'll give it to him," Redhot shot back as Bender slammed the door and retreated toward his engine. "Great, big, overgrown lobster come around here bullying and browbeating a girl just because she made a little blunder her first night on the job. I'll tell him something, and if the rest of you male railroad men crave to hear it, I've got plenty saved up for you, too."

Blondie quit crying and stared dumbfounded at her defender. The conductor and his brakeman suddenly remembered a "hotbox on that car of scrap next the caboose."

After they had left the office, Redhot tossed her pert little red head and commented: "Maybe that'll hold them for a while."

It did. But not for always.

"There's No Bandits Left Here"

THE thirty-mile stretch of road centering at Creeping Shadows had been a jinx-land for the Gulf Lines. Before the road came through it was an outlaws' paradise. Jesse James and his gang, in days gone by, had used that region as a hide-out. The Olders, Moons, and Walkers—the Johns and the Pretty Boys of another

age—had made it their rendezvous and had sired half-breed children to grow up running wild in the wilderness.

The coming of the road and its attendant civilization had destroyed their refuge and interfered with their business. They had retaliated with robbery, wrecks, and murder—and petty annoyances.

Although Blondie was not yet aware of it, fresh in Redhot Frost's memory was the murder of Jim Steele at Cedar Bluff, three miles from the station.

Fresher still was the recollection of a night in early spring when the outlaws had seized her father, when Addie Steele had gone down a rope into the depths of Creeping Shadows Gorge to effect a rescue and to fight a battle whose details were still unknown save to him and the surviving outlaws.

It was not long until Redhot learned that, though the outlaw gang was dead, the Creeping Shadows jinx still lived, yelping hot on the heels of her and Blondie Barr.

Blondie drew ten brownies. Demerit marks. Too many such marks would automatically mean dismissal.

Bender Johnson told the rest of the boys, with appropriate gesture, how the newest "female op" had stood on the river brink and tried to ring an order hoop around "my brakeman's neck, and him standin' on the engine step"; how "my brakeman" had missed the hoop and they had had to back into Creeping Shadows and lose an hour.

He reported also that he had told the "driveling idiot" things for the good of the service.

Bender, of course, did not know how hard life was for Blondie, nor at what sacrifice she had made her scanty preparation. It would probably not have mattered if he had, because Bender during twenty years of plenty had forgotten the bitter struggles of his own youth.

Redhot's interference did not soothe his injured feeling. Though he neglected to tell the boys that she had scored in the battle of words, the more he thought about it the madder he became. From that night on, he viciously cursed petticoat railroaders and swore he'd make them wish they'd never tried to horn in on this man's job in the Creeping Shadows country.

"Damn their hides!" he raved. "I'm the boy that's goin' to hang it on 'em the first chance I get. And I'll get the chance. Wimmen don't know nothing about railroadin'. They'll slip, and slip far and fast. Jist you watch me!"

Naturally, Redhot's conductor-father knew what he was saying, and one night when he stopped in for orders he warned them:

"You girls watch Johnson. Don't ever pull any boneheads around him. If he gets anything on you he'll do more than help you pick up a few brownies."

Because Redhot knew, she remained at the office that night and other nights teaching Blondie what to do and how to do it. But she couldn't stay forever.

The new girl lived in constant terror of long nights in the lonely office, especially after Grandma Garland told hair-raising tales of the Creeping Shadows outlaws. But Redhot, at the end of ten days, left her to hold the trick alone.

ALTHOUGH Blondie regarded her job as a sacred trust and worked like a slave, she did not make rapid progress. She was bright, but she was nervous.

Her total ignorance of railroads was

against her; and it seemed that Fate kept throwing her eternally into the power of the one man who was determined to break her, to drive her off the job.

When she let the carbon paper slip that October night, causing her to leave most of the figure 9 off a second copy of the order, causing her to write an engine number as 88 instead of 988, who of all the men on the line should get that copy but Bender Johnson?

As soon as he got it, he must have known there had been a slip, because there was no 88 on the line. Besides, a tiny bit of the 9 was showing,—not much, but a little.

When he met extra 988 at Wilton, he made a big noise, stopped the train, called the conductor over, compared orders, and immediately "wrote up" Blondie, sending his copy of the order with the letter.

That was exactly what his rule book told him to do. It was safe railroading, but he could have covered up the error had he so desired.

The result was thirty brownies on Blondie's service record. Also more boasting from Bender, increased fear in the heart of the little hill-billy girl, and the fresh admonition from Redhot:

"Watch your step, kid! These men are out to get you."

After that, Blondie got along nicely for a full month. Even old Hank Davis, the station agent, was forced to admit grudgingly that her work was as good as that of the average man who came to the graveyard trick at Creeping Shadows.

Mid-December came. Clouds were eating off the tops of low hills crowned with dark green of pine and cedar. Echoes from the river whispered through the wild grape and Virginia creeper whose leafless tendrils rode skeleton oak and walnut toward the leaden sky. A bitter wind sobbed in from the east with a cold fog running before it.

Redhot Frost, trousers tucked into lace boots, gray rain-coat buckled under a saucy chin, green tam tilted back from red-bronze curls, crossed the bridge and strode jauntily up the platform on her way to work.

Proud of her record as a railroader, confident that Blondie, too, was going to help her *show the boys,* she splashed by the bay window whistling gaily:

"Hail! Hail! The gang's all here!"

She shoved open the door of the telegraph office. Then she wrung water from the tam, threw it on a nail, and quit whistling long enough to greet the bespectacled agent with a friendly:

"Hi, Hank! How's tricks?"

OLD Hank Davis had been telegraphing twenty years before Virginia Frost was born. He had never approved of the girl, her garb, her whistling, nor the way she had horned into the railroad game. Today he glowered over his specs, spat disgustedly at the convenient box of ashes, and grunted, "Howdy!"

Redhot chuckled good-naturedly. She laid her lunch atop the iron safe, pulled off the rain coat, ran through the order hook and checked the train sheet. Everything was late that night. The northbound local freight, No. 46, was annulled. Train No. 5, which should have been through at 3.20, would not be in until after seven.

Hank shoved back the chair with the glass insulators on its feet. Leisurely he thrust his spectacles into their case. Then he issued his nightly instructions. Though Redhot had been here four months now and knew every chore, he

told her exactly what to do and how to do it.

He told her to "tell that chum of yours to file the orders an' copy the waybills." He instructed her to stand back from the track when she was handing up orders so she wouldn't get killed. He cautioned her to be sure her board was red when she had orders to deliver, and clear when she didn't.

Although the veteran agent had gone through the same formula a hundred times, Redhot listened respectfully and assured the old man that his warnings would be heeded and his instructions obeyed.

"Is that all?" she queried.

"Do you reckon you kin look after the mail an' express off Number Five tonight?" he cackled. "Or will I have to come back through the cold?"

"I have been receiving mail and express of Number Nine and Number Six, haven't I?"

"Ye-e-es," Hank admitted grudgingly. "But Five's carryin' the Creepin' Shadders lumber payroll tonight. There's close to a thousand dollars—"

"That's nothing," said the maiden lightly. "I've handled that much a dozen times this fall."

With nothing more to crab about, the agent got into his boots and slicker and started home. When he was halfway to the bridge, he turned back.

"You be shore to lock your door an' fasten your waitin'-room window, gal," he charged. "An' don't you let nothin' happen to that payroll."

"Go to sleep and forget it, Gran'pop," Redhot answered with a faint smile. "There's no bandits left in this man's country."

THE next hours were busy ones. She scrubbed out old Hank's excess "terbacker" juice, swept and burned trainmen's cigar stubs and loafers' snipes. She sent or received five commercial messages, delivered four train orders, and OS'd six freights through.

As the dreary darkness settled, mist and fog changed to sleet. By 7.30 the skeleton trees wore swaddling clothes of crackling white, while the board platform was coated thick with ice.

Railroad business was heavy the winter of '17. Train No. 85, the *Gulf Coast Merchandise,* was running four sections that night. The first one was by at 5.20, the second at 5.45. At 6.20 she was expecting the third.

Because the night was nasty and disagreeable, and because boomer brakemen, on one pretext or another, had begun dropping in to chat while their engine crews took water, Redhot went into the waiting-room and built a fire in the pot-bellied stove.

At 6.19 a freight whistled for the milepost. She called the dispatcher, DS.

"Third Number Eighty-five showing," she reported.

"Let him go," DS instructed. "Nothing for him."

At 6.25 the engine clanked by the office and stopped at the water tank. Redhot listened for a step on the boardwalk and looked for a brakeman's lantern to come her way.

The head man came back twenty cars and turned. The hind man didn't get off the caboose.

Redhot was a little disappointed, for in spite of the verbal battles she was having with them, it was nice when the boys dropped in. It helped to break the monotony.

The op sighed and leaned back in her cushioned chair. Click of the instruments ceased. In the dead silence

she heard the sound of an advancing footstep. She decided it was not a trainman, because there was no lantern.

It came even with the waiting-room door and stopped. Redhot got out of the chair and watched. For a minute, two of them, nothing happened. Then the door opened slowly and a bum looked in.

He was not a nice bum. He was whiskered and dirty. His tattered overcoat was tied at the waist with a length of frayed quarter-inch rope.

Cracked lips opened in a silly grin. Eyes with lids red, rheumy and turned out at the edges, roved over the wait-room and rested on the redhot stove. Opening the door a bit wider, he came inside and edged up to the stove.

The Gulf Lines had not been bothered much with hoboes. They had high-pressure bulls and a good jail at each entrance to the Creeping Shadows regions.

Redhot had not been molested since she had come to the job in August. She eyed this fellow suspiciously. She glanced at her office door. It was locked. Even so, she felt a trifle nervous. When, having absorbed a little heat, the intruder did not dash out and grab the train as it started moving, the girl's nervousness increased. She called out the waiting-room window:

"If you intend to ride that rattler, mister, you'd better grab it. They leave this burg running like nobody's business."

"I—I don't want to ride it out, Miss," he whined. "It's cold tonight, an' I'm sick, an' I want to stay here by your fire—if you don't mind."

Redhot didn't insist too strongly. The man did look sick and, though he was as loathsome a specimen as she had ever seen, she did not force him into the sleet storm outside.

THE window into the waiting-room was three feet high by four wide. She pulled it down and fastened it on the inside.

For a long time the bum remained by the stove, turning like a mutton leg on a roasting spit. When he had sufficiently thawed out, he lay on the long bench against the west wall.

Redhot, convinced that he was a harmless soul, brought out her lunch and spread it on the instrument table. While she ate, she heard her father signing out of Fort Jones on Extra 984 south. Bender Johnson was pulling him.

The dispatcher put out a meet to fourth No. 85 with a northward extra at Wilton. At 7.25, Black Mountain OS'd No. 5 through. She figured the express would be in Creeping Shadows around 7.55.

Tossing the remains of her lunch into the office stove, the girl wrapped up and started out to prepare for the train's arrival. First she went into the waiting room. Her visitor was sleeping. She locked the office door behind her, filled the hot stove with fresh coal, and went to the platform.

It was slick as glass. When she started to move the baggage truck, her feet went heavenward, and she sat down on her lantern. While lighting it she murmured: "It sure would be a good night for some poor devil to get his heels cut off."

Then she thought of her father, remembered he was coming south on Extra 984. His crew would be peddling stock cars.

"Dad's getting old to be hopping around on freights nights like this," she said. "I hope he doesn't try to walk those slick tops."

Working cautiously, she moved two trucks from under the eaves, one for

the mail, one for express. She lined them up alongside the tracks and locked the wheels so they couldn't roll out into No. 5. When she returned to the office the bum apparently had not moved.

At 7.58 the train rolled in. Mail clerks unloaded thirty sacks and pouches. The messenger put off a lot of empty cream cans and a dozen other pieces of express. One of them was a small iron box weighing twenty-two pounds.

While Redhot was signing the receipts the messenger said:

"Watch this box, sister. Don't leave it lying around the freight room. It's full of kale."

"I've got a hole open for it, brother," she returned in the same tone. "Old Hank told me it was coming."

When the train pulled out she didn't leave the iron box on the truck with the cream cans. She carried it through the waiting room. The bum had gotten up. He was rubbing his eyes and yawning. She did not think he noticed what she was carrying. She never knew for certain.

REDHOT did not have the combination to the safe, but Hank had left it open for her tonight. She put the box inside, twirled the knob and the safe was locked.

When she looked around she saw the bum standing by the closed window watching her. He turned quickly back to the stove. Something warned her there was trouble ahead. The girl had a hunch that she should not go out of the office, but she had to do so. There were trucks outside whose contents must be gotten into the freight room.

This freight room was a big, barn-like place opening off the telegraph office. The door leading to the platform was big enough to drive a wagon through. It was held in place by a pine scantling dropped into two iron sockets.

Redhot hurried through the freight room, removed the scantling and went on out to the platform.

The girl had already rolled the two loaded trucks close to the door. She now unloaded the mail and express packages in the room, piling them to right and left so as to leave a large clear space directly in front of the big door. The cream cans she lined up outside.

She was gone from the office several minutes. Twice she peered in to see what the bum was doing. The first time he was standing by the stove. The second, he was lying on the bench; and when she came in, he was apparently asleep.

Although copying freight bills was graveyard-trick drudgery, Redhot always did it for Blondie when she had time. The "originals" were made out in copying pencil. The permanent record was kept in a big press book with leaves of tough yellow tissue.

To copy the bills, the original was laid facing the tissue sheet. A cloth was wrung out of water, laid over the sheet, the book closed and put under a screw press. Moisture made indelible ink out of the deposit from the copying pencil, and this left a duplicate on the tissue sheet for permanent record.

Both the press stand and the table where she arranged the bills were behind a turn in the wall, so she could not see the window when she was fixing the copy.

While Redhot was sorting the bills, her dispatcher began calling the initials

His Head and Shoulders Were in the Office; His Heels in the Waiting Room

of the Creeping Shadows station, "CS—CS—CS—" As she went past the window she saw the bum still lying on the bench. Evidently he was paying no attention to what she was doing.

She answered the call. The dispatcher signalled "31 south copy four." Redhot pulled her board and transmitted "SD" (signal displayed). She then copied and repeated the order:

4th No. 85 engs 72 & 947 coupled get this order meet exa 925 north at Creeping Shadows instead of at Wilton.

By the time she had it ready, fourth No. 85 was stopping for the water tank. The conductor came to the waiting-room window, which she had now opened, and called:

"What you got for me, sister?"

"I've got a 'thirty-one.'"

She laid the clip in the waiting-room window. While he was reading it, the dispatcher called CS again. Because the extra was falling down at Wilton, he was going to smash the order to fourth No. 85 and let the old meeting-point stand.

REDHOT issued a clearance for No. 5 and the train left town. The girl returned to her desk. Then suddenly she realized that she had left her window open. The bum was scrambling through. His head and shoulders were in the office, his heels in the waiting-room.

The op whirled and grabbed the pail of water which she had been using for the copy press and dashed it into his dirty face.

He let out a startled "woof!" She raced for the iron poker but she didn't need it. Before she reached the window the bum was out again. He did not stop by the waiting-room stove. Even though he was wet to the skin with that icy water, he dashed out and headed toward the hills west of the station.

Redhot was frightened. She did not know why the stranger had tried to sneak into the office. Suppose he had been after the iron box? He might return. The girl locked all her doors and built a big fire. She did not report the matter to the dispatcher nor even call the town marshal. She did lay her thirty-eight on the table and pull down the window shades.

Fourth No. 85 had gone south at 8.25. It was 8.40 when the bum departed. At 8.55 the northward extra stopped by the water tank and the conductor came to the office. He saw water on the floor and the thirty-eight on the table. He became inquisitive. Redhot told him what had happened.

This conductor was one of the boys who had been making fun of the female railroaders. He joked about it and told Redhot she should be ashamed of herself for chasing the poor devil out on a night like this.

"He'll freeze to death before morning," he concluded with a grin.

"I hope he does," Redhot retorted. "Darn his hide! He could have stayed by the fire all night if he'd kept out there where he belonged."

"The man just couldn't resist your feminine charms," the conductor teased. "That's what comes of the fair sex pounding brass on midnight jobs."

The extra went north at 9.10. It met No. 9 at Moon Valley. As soon as its tail lights had disappeared, Redhot pulled down her shades. She had a feeling that her unwelcome visitor was close by. He was. In fact, he was going to spend most of the night in the depot, but he wasn't going to come in through the waiting-room window.

At 9.40 the *Flying Bee* whistled for the milepost. Redhot, expecting it to stop at the station, raised her shades and went to the platform. Sleet had changed to a drizzling rain which was freezing as it fell.

The headlight came out of the cut. As the engine crashed over the switch, the whistle sounded a mournful *whoooo—whu-whu-whu,* calling out a flag, and the train stopped with brakes in emergency halfway to the switch.

Tragedy at the Switch

REDHOT knew something had happened, knew it even before she saw the engineer come out of the cab with his torch and go stumbling back with the fireman close at his heels.

She started toward the engine. Then she remembered there was an iron box in her safe which must not be left

alone. She did not go. Soon the engineer and the conductor came down to the office. They looked solemn.

"What's happened?" Redhot asked.

"What was the last thing out of here?" the conductor countered.

"Extra Nine Sixty-three went north at nine ten," she answered. "What's wrong?"

"They killed a bum up here at the switch."

Redhot thought of the bum she had doused with ice water. She remembered what she had said about his freezing to death. She felt sick.

The conductor misread his signals. "Don't faint, miss," he said. "He was only a dirty bum. He must have tried to grab that freight going out and missed his step. He's just as well off."

"It's awful!" Redhot muttered huskily, trying to cover up her agitation.

"You run on back in the office and tell the delayer. Picking him up ain't going to be exactly a job for a lady." The conductor's tone was full of irony.

He called the coroner and the marshal. They came over and helped the train crew bring the remains down to the station. Redhot shuddered when she saw them.

The coroner ordered them "to leave the *corpus delicti* in the depot till we can hold an inquest in the mornin'." So they left it under an army blanket in the freight-room—*exactly in the big door.*

When the coroner and the marshal had returned to town, and the train had gone to Blaisdell, Redhot was alone in the office. Creeping things tickled her spine. She kept glancing furtively over her shoulder, recalling that whiskered apparition crawling through the window.

But she managed to hold her nerves under control, and kept busy about the office until Blondie came.

She debated whether to tell Blondie about the cot with the blanket over it in the freight-room door. Her father had always said: "What a fellow don't know won't hurt him." If Blondie didn't know, she might be spared a night of superstitious terror.

She would not know unless she went into the freight-room, and Redhot could think of no reason for her going in there until No. 6 ran after daylight in the morning.

That's where Redhot overlooked her hand. She forgot that the local might have stuff for the freight-room, or even that the local was on the road.

BLONDIE had been reared in the Missouri Hills, twenty miles from the nearest railroad. Her mind had been warped with garbled notions of ghosts and spirits.

If Redhot had told her about the corpse, or that a bum had tried to crawl through the window, she would have gone into the night in the grip of deadly terror. Even so, it probably would have been better, because then she would never have done the thing she did.

Rules required copies of train orders and messages pertaining to operation to be filed and forwarded weekly to the division superintendent.

Blondie, in filing, saw the message in which the conductor of No. 9 explained forty minutes' delay in Creeping Shadows, "account running over trespasser killed presumably by exa 963 north." The maiden wondered why Redhot had not mentioned the accident. She even felt the creeps because the man had been killed nearby. She never dreamed that the remains

were beyond the freight-room wall.

At 1.15, the dispatcher called Black Mountain and Creeping Shadows. He gave Black Mountain the instruction: "31 south copy three." He told Blondie, "19 north copy three."

When Blondie set her signal she hesitated which lever to pull. She always did. Mentally she repeated her formula, "Right—south; left—north," and pulled the left lever. She then transmitted her "SD" and copied:

Exa 712 north take siding meet exa 984 south at Moon Valley instead of Creeping Shadows.

Black Mountain repeated. Blondie repeated. The dispatcher told her to "call that local up the main line." She clipped the orders into the hoops, hung the hoops over her semaphore lever, and waited.

It had quit raining and the north wind sobbing down the valley was like the moaning of the damned. A long icicle breaking from the station eaves fell with a crash and slithered down the walk. Blondie's heart jumped into her throat. Then she laughed at her own timidity.

At 1.25 the extra was showing. Blondie, recalling the dispatcher's instruction, worked the semaphore lever, lifting, lowering, "winking her board" at the engineer to bring him up the main line. At the third wink he answered with his whistle.

Blondie donned gloves and sweater and went to the platform to hand up the orders. She had learned how, now. She had learned many things. She did not stand too near the track nor too far away.

The engineer reached down from the deck. He caught the hoop, returned to his throttle, and in answer to trainmen's signals from the rear, stopped the train with the "peddler" car spotted at the freight-room door.

CONDUCTOR "FATTY" SIMPSON was a jolly, good-natured captain. Though he was past middle age, he still had a soft spot in his heart for woman—any woman—even a female railroader. He came skating up the platform, caught Blondie by the arm, and cried gaily:

"Hi, kid! How's the sweetheart?"

The little hill-billy had always been afraid of men. Redhot Frost, however, had been giving her lessons in the art of putting them in place. Because she was learning, and because she liked this pudgy, good-natured conductor, she retorted:

"Okay, Fatty. How's the new grandchild?"

The brakeman haw-hawed. Fatty laughed boisterously.

"Fine, sister!" he responded. "Fine as that brakeman you tried to lasso out of Bender Johnson's cab last fall with an order hoop."

The girl laughed and handed him the order. He was railroading now. He asked seriously:

"What is it, Blondie?"

"A meet with extra Nine Eighty-four at Moon Valley instead of Creeping Shadows."

She started back to the office. He read the order, slipped it into his pocket, and called after her:

"Wait a minute, girlie."

"Well!" She stopped. "What now?"

"We've got a few pieces of freight for you. If you'll be a good little girl and open the freight-room door for us, we'll unload it right in the house."

Blondie was a good little girl. She had been trying desperately to convince

these men she was anxious to help keep trains moving.

She hurried into the freight-room. She was almost running when the feeble ray of her lantern fixed on the cot in the door. She stopped. Bulk and the worn toe of a boot told her what was under the blanket.

For five wobbly pulse beats she did nothing. She found her voice first. She screamed and screamed again. The local crew came dashing in through the office, shouting half in derision:

"What's the matter? Did you see a mouse? Has a ghost got you?"

They were ready for the big laugh, of course. Railroaders usually are, But at the sight of the cot, all fun went out of them. Fatty Simpson uttered an awe-struck: "Oh-h!" The brakeman said nothing.

Fatty, who had a soft spot in his heart for Blondie anyhow, put an arm about her and led her unresisting into the office.

The brakemen didn't return to the freight-room, but unloaded their stuff in the office. Then they waited ten minutes while Fatty walked Blondie up and down the platform, until she regained self-possession.

She knew the crew had lost several minutes, and she blamed herself for the delay. She said something about reporting to the dispatcher.

"Just you say nothing about it, kid," Fatty advised. "You let *me* fix it up."

BLONDIE looked at him in astonishment. She was aware that men fixed little things for each other, but it was the first time one of them had offered to fix anything for her.

"We've got a hot box on a car of company coal," Fatty said with a sly wink. "Yuh know a conductor can always find a hot box to hang a few minutes' delay on. Just you keep mum. We'll get out of here as quick as we can get somebody to stay with you."

Blondie wanted somebody to stay with her. Oh, how she wanted it! Never had she stayed alone at night with a corpse. But she fought down the desire, and said with an air of bravado:

"You don't need to get anybody to stay with me. I'll stay by myself."

Fatty gave her a fatherly pat on the head. "That's the way I like to hear you talk, kid. Now you're railroadin'."

The swing man, who was boomer, said approvingly: "If you get a few more jolts, sister, you'll be a railroad man yet."

It was 2.09 when they left. The trainmen had been here forty-four minutes when they should have been out in twenty. The last that Blondie saw of them, all three were on the rear platform of the caboose waving their lanterns. With a sinking heart she returned to work and OS'd them by.

Now that the excitement had subsided the inexperienced girl was alone with clicking instruments, dripping eaves, moaning wind—and that thing in the freight-room!

Out on the hillside, a hoot owl uttered his weird cry. While she listened breathlessly to the owl, Blondie heard the dispatcher calling her. She came to herself with a start, aware that he had been calling a long time; and when her trembling hand cut in to answer, he impatiently instructed her to copy three "19" orders for the south.

If the girl had been herself when she set her signal, she would have hesitated and repeated her formula: "Right—south; left—north." But she was *not* herself. She was a terror-stricken bundle of nerves.

The op sprang to her feet and

The Feeble Ray of Her Lantern Fixed on the Cot, and She Stopped

grabbed the semaphore lever, not the right one, but the left—the one setting the signal against the northbound and leaving the southbound clear.

The Gulf Lines were doing away with the "31" order. Except when the restricted train received the order at the meeting point, they were now restricting rights with the "19," which did not require a conductor's signature. This order read:

Exa 984 south take siding meet exa 988 north at Wilton instead of Potter . . .

Potter was twelve miles south of Creeping Shadows; Wilton was six. The order, therefore, restricted the right of extra 984 beyond Wilton. The dispatcher was changing it, because the local—extra 712 north—had laid out the 984 at Moon Valley, and he could now move the 988 one station farther north for the meeting-point.

BLONDIE BARR had nothing to do after she copied the order. She should have noticed the position of her levers; but she could not shake off the

effects of her shock, and she kept thinking about that thing in the next room. Even though thirty minutes elapsed after she copied the order, she did not discover her error.

She was on the platform holding up the light and the hoop when the engine came by. Not a man showed his head. The young woman was puzzled. She knew positively she had set her signal. She wondered if the men were all asleep.

They were not. Bender Johnson came batting down forty miles an hour with a clear track to Potter. The order board was green when it went out of sight behind his boiler head. Because the fireman and brakeman were awake and talking, he did not check with them.

Extra 984 had a deadhead caboose* that night. In it were Conductor "Shrimpy" Saddler and two brakemen. Because they were not working they should have been asleep in their bunks.

Conductor Jack Frost and his brakeman, "Skeet" Older were running the train. They were wide awake, as they should have been.

They had been peddling stock cars all the way from Fort Jones. With but forty left in their train, they saw the order board light when the engine went by it. It was green. Skeet called, "Clear board!"

"Clear's the word," Jack echoed.

Skeet had not been railroading long. He did not know the game but was trying to learn it. He went studying his timecard, figuring where they would meet No. 6.

Redhot's father had been railroading a long time. He boasted that one reason he was alive and in good health was that he "never trusted no *student* for *nothing*."

He knew Blondie was on duty. Although she had never handed him an order on a clear board, other student operators had. He watched all of them. Maybe he had a hunch tonight, because he went to the rear platform instead of watching from the cupola. Seeing Blondie's lantern, he knew from its position that she had something for him.

When he swung out from the step she hung on his arm not one hoop, but two, each with the same order. He realized at once she had failed to deliver an order to the engineer. He swore a little, removed the orders and flung the hoops back to the ground.

BLONDIE did not waste time chasing hoops. She was too scared. She knew the head end didn't have a copy of that order. She knew by the train reports that extra 988 would be waiting on the main line when he arrived.

With the track running into Wilton on a sharp curve through dense woods, Bender Johnson would never see the headlight until he was right into the other train.

Aware that no man could walk slippery car tops to the engine as they were tonight, but unaware that a conductor has means of stopping a train from his caboose, Blondie could picture the 984 batting around that curve, hitting the 988 head-on and killing everybody on both engines. Groaning inwardly and bewailing the day she had gone railroading, the unhappy girl dashed into her office to tell the dispatcher.

** When business is heavier in one direction than in the other, crews pile up at one end of the road. To relieve the situation, they are deadheaded over the division, sometimes riding their cabooses, more often riding passenger trains and leaving their cabooses to be hauled by other freight crews.*

Before she could get him, however, she recalled Redhot Frost's admonition: "Never report anything till you have to, kid, and then make your report darn brief."

She reflected, too, that the dispatcher could do nothing to avert a collision. Consequently, when she got him, she OS'd the 984 through, said nothing about the failure of the head end to pick up their order, and sat down to think it over.

Redhot had repeatedly told her: "If you get into a jam, kid, call me and I'll come and help you out."

Blondie thought she was in a jam now. She picked up the telephone receiver and got the number. A sleepy voice answered, "Hello."

"I wish you'd come over here, kid," the hill-billy girl cried excitedly.

WHEN Redhot Frost entered the station at Creeping Shadows, after dressing hastily and running all the way, her face wore a sympathetic grin.

"Did you find it?" she asked.

"Find what?"

Blondie had forgotten all about the corpse in the freight-room. She was thinking of that missed order, awaiting breathlessly the dreaded call for the wrecker, and wondering how Bender Johnson's neglect was going to take her precious job away from her.

In high-pitched, excited tone, she explained to Blondie what had happened, ending with the fearful query: "Do you reckon the two trains'll get together?"

"Not if Dad got his copy of that order," Redhot assured her.

"He got it all right," said the younger girl. "I gave him both of them. But how will he stop them? He can never in the world walk the tops tonight. They're slick—"

"He won't have to walk 'em, simple. If Bender don't slow down for the switch, Dad'll reach up and pull the air on him and—flooey! He'll stop!"

With a relieved "Oh-hhh!" Blondie dropped limply into the chair.

Redhot glanced about the office, noted Fatty Simpson's slicker lying across the chair. She didn't ask herself why it was there, because she was wondering about that missed order.

"I can't feature Bender Johnson running a red board," she said musingly. "Are you sure you had your board out?"

"Of course I did! Why, I remember—"

Redhot was looking at the semaphore levers. Blondie, in her excitement, had forgotten to pull in the board after the 984 had run. Redhot slipped off the table and looked about for an order.

"What have you for the north?" she queried, a light dawning in her keen hazel eyes.

"Why, nothing," Blondie replied.

"Is that the board you pulled?" She touched the left lever.

"Ye-e-es!" Blondie's eyes were getting bigger. "Oh, my God!" she quavered. "No wonder he didn't stop. *I—I pulled the wrong board!*"

Redhot leaned forward and cleared the northbound board. Neither of them said anything for a long time. Finally Blondie whispered, "I guess that's the end of me."

"It is if the office finds it out," Redhot answered seriously.

"They'll find it out. That guy Bender Johnson will be tickled to death to turn me in. Do you think I'd better report it?"

"Nope. You might as well die for a sheep as a lamb. If he reports you, you're fired anyhow."

OLD Jack Frost read the order and handed it to his brakeman.

"Where did you get that?" Skeet asked in surprise.

"Operator handed it up, of course. You didn't think a ghost brought it, did yuh?"

"But that board was clear!"

They ran a full half-mile before the conductor spoke. He tamped a load into his pipe, struck a match, and in its glow grinned across the cupola.

"You're color blind, kid," he said.

"Like hell I am! That board—"

"Listen, son!"

Redhot's father leaned far across the cupola. He had spent forty years on the railroad. Experience had developed in him a kindly philosophy which is the heritage of many an old-time rail.

"There's lots of things happen on a railroad that all concerned are just as well off if they ain't talked about too much. Take this deal here tonight. Maybe that board was clear. Let's say it was. If we talk about it, they'll fire that girl—"

"She ought to be fired. If we hadn't got that order—"

"But we got it, Skeet."

Briefly the conductor repeated what his daughter had told him of Blondie, how hard she was trying, under what handicap, and how much the job meant to her.

"We got the order," said Old Jack. "We ain't goin' to let Bender hit that Nine Eighty-eight. When I git done talking to that young lady, she ain't goin' to hand any more orders to train crews on clear boards. She'll go on and make a good operator. What yuh say, son? Was that board clear, or was it red?"

"Red as the King of Hearts," Skeet agreed enthusiastically.

The conductor had a time with the engineer. Bender whistled for Wilton and whistled through. Jack set the air on him and hurried to the head end, demanding:

"What'n blazes does a smart hogger like you mean trying to run a meeting-point? Didn't you get that order at Creeping Shadows?"

"The Creeping Shadows board was clear," Bender protested.

"In a pig's eye it was clear."

They argued long and loudly. Bender swore up and down it was clear. He even wrote a letter to Division Superintendent Sears, explaining the situation. He did not send it, because the conductor and the hind brakeman stoutly averred it was red when the engine passed it.

By the time Bender got into Blaisdell he was not willing to stake his job on the proposition that it *was* clear. He *thought* Frost was trying to "pull a fast one" on him in order to protect Blondie, but he was not sure.

He dropped the letter into his grip and didn't talk about it. Jack rode the cushions back to Creeping Shadows that morning and had a long session with Blondie. They thought the matter was closed.

Bender Overlooks His Hand

IT would have been closed, no doubt, except for Shrimpy Saddler. Shrimpy, who had been conductor on the deadhead crew that night, had not been asleep as he should have been. A nervous old codger, never able to sleep in a moving caboose, he had been sitting in his cupola wide awake when

they came through Creeping Shadows.

About a week later, Shrimpy, Jack, Bender, and another engineer met in Jack's caboose in Fort Jones for a little friendly game of poker. There were clouds and an east wind. A snowstorm was brewing over the Creeping Shadows. The men talked about the storm, and then they talked shop.

Shrimpy said that his boy, Jess, wrote home that the Yanks were sure teaching the Frenchies a few tricks about running freight trains, and predicted that by the time the war was over there might be some railroads in France.

Bender sarcastically declared that by the time the war was over, there wouldn't be any railroads in the United States if they kept hiring females to run them.

Shrimpy reckoned they wouldn't be needing any order boards if they hired a few more like that little ignorant jane down at Creeping Shadows.

Old Jack lost his poker face, while Bender pricked up his ears. Shrimpy, unaware there was misunderstanding between Jack and Bender, continued:

"Jack's gettin' pretty good at pickin' 'em off the green, eh, Jack?"

Jack kicked Shrimpy's shin, but Shrimpy didn't take the hint. Grinning from ear to ear, he said:

"You didn't know I saw you pick up that one off the green the night I deadheaded down with you, did you, Jack?"

Redhot's father was suddenly very busy playing poker. Bender lost all interest in the game. He flung down his cards and looked at the two conductors.

"Was that Creeping Shadows board clear that night?" he demanded sharply.

"Why, of course, it was—"

The friendly game ended in an argument. Bender swore that no brainless, bald-headed, shriveled-up conductor was going to make a fool out of him and get away with it. He vowed he'd write the case up to Superintendent Sears.

"I wouldn't get premature about it, Bender," Jack advised. "Mr. Sears might want to know why you didn't write it up that night instead of waiting a week."

"I don't give a damn. I'm goin' to write it up just to prove that you birds can't pull anything on me."

Bender was good at writing things up. Men, good men, had changed jobs because Bender Johnson had seen them blunder.

He spent an hour composing a letter of explanation. Before he had finished, he was called for first No. 85 with Jack Frost. He took the call and put away the letter to finish when he got into Blaisdell. He was still mad when Jack came with the orders.

The latter tried to square things. He started by saying: "Redhot's ridin' down to Creepin' Shadders with us tonight, Bender. I wish you'd manage to stop there—"

"I'll stop if I have to take water or meet somebody," Bender answered shortly. "I'll give you to understand I ain't pulling a passenger train. If Redhot wants to go to Creeping Shadows, let her ride No. 9."

Jack did not press the matter. He had other favors to ask. Unless he could get under Bender's guard before they reached Blaisdell, he realized that Skeet Older and himself were gone, as well as Blondie Barr.

He tried to find a soft spot in the engineer's heart for the little hill-billy girl, but there was no soft spot. Bender stormed and swore he'd show them.

Having failed in diplomacy, Jack lost his temper and told Bender a few things. He reminded him of the night when an engineer had gone down the main line in the face of a passenger train and a conductor had saved his job for him; and reminded him of other slips in years gone by.

REDHOT had come over to Fort Jones the preceding night to see the lights, go to a picture show, buy "some duds," and do her Christmas shopping. She was going down with her father, because she had rather ride the caboose with him than relax in the round-topped cars.

When her father came into the caboose, she was up in the cupola flirting with the hind brakeman and watching the floodlights glow dully through the thin cold fog which hung over the yards. She sensed the minute his foot hit the platform that something was wrong.

Jack concealed nothing. He explained their predicament, how it had come about and why.

"Unless Bender cools off before he gets into Blaisdell, it's good-by for us," he gloomed.

Redhot tried to console him. She said he had been working on the railroad long enough, and told Skeet Older he could get a job elsewhere.

"Did you remind the darned rawhider of that night he misread his watch going into Wilton?"

"He's never forgot it," Jack said bitterly. "It still sticks in his craw. Yuh know, daughter, I've come to the conclusion after forty years tryin' to help other folks out of trouble, it don't pay. The best way to make an enemy is to try to help a friend out of a jackpot. I never saw it fail. From here on, I'm goin' to wash my own dirty linen and let the other guy wash his."

"No, you won't, Dad." Redhot laid a soft hand on her father's arm, and the hazel eyes grew moist. "You ain't built that way. You'll go right on helping others till the Lord calls you in to sign the last register."

Jack laid a disfigured hand on his daughter's plump one.

"Right, kid!" he said huskily. "It's too late now to change."

Many trains were on the Gulf Lines that winter. Too many trains for single iron. Many trains made many orders. Jack brought in a sheaf of them thick enough to wad a cannon. He had read them. He gave them to Skeet.

Skeet read them and laid them one at a time, face down, on his cushion in the cupola.

There were orders limiting their speed over holes in the road; there were orders giving extra freight trains right over them; there were passenger trains running late. One order told them:

2nd No. 4 eng 764 run five hours and twenty minutes late Blaisdell to Fort Jones . . .

Ordinarily Jack and Skeet would have discussed that second No. 4. They would have guessed one to the other that it was a soldier train. They would have figured where they were going for it, and counted how many crews it left in Blaisdell.

Because they were worried that night, they did not discuss it. Skeet hung the orders on the hook between the cupola windows.

Even when first No. 4 passed them in siding at The Narrows and whistled signals at them, they remembered only that they would meet the second one

hours later, beyond the Creeping Shadows mountains.

BENDER JOHNSON thought he was good. He had a powerful mind in a powerful body. He prided himself that he never forgot anything, that no matter how many orders a conductor brought him, he read them once and remembered.

He read them once that night. He read the order on second No. 4 and figured he would meet them beyond Creeping Shadows.

His fireman and brakeman were both students, youths fresh off the farm. They did not ask to see the orders; and Bender did not offer them, because he figured students didn't know what it was all about anyhow. He wadded the orders up, stuffed them in his overall pocket, and left town.

It had been fourteen years since Bender had overlooked his hand running into Wilton, since the night Jack Frost had pulled the air on him to keep him from hitting a passenger train in the face. He had never overlooked anything since. He had no idea of overlooking anything that night.

He would probably not have done so if he had been using his mind the way his Creator intended it to be used. But he wasn't. He was gloating over the coming ruin of old Jack Frost and Blondie Barr.

He was rejoicing because he had "caught up with the damned old crook tryin' to pull a fast one." He was cursing a green fireman for not keeping steam to pull a train with.

He was trying at the same time to figure so he would not have to stop at Creeping Shadows for water or a meet, so he could carry Redhot by her destination and force her to ride No. 6 back in the morning.

Blondie did not know, of course, that Shrimpy Saddler, talking to Bender Johnson, had highballed the trouble train for her and her friends; but from the time she came to work, her heart was filled with evil forebodings.

"I knew," she confessed later, "that something was going to happen that night, but I didn't know what."

Maybe it was that feeling of unrest which kept her listening in on the dispatcher's wire. She was getting a line on what trains were on the road, mentally cataloguing them, and figuring about what time each would be by Creeping Shadows.

The girl heard every order put out from the time she went to work at 4.00 P. M. until after 2.00 A. M.

She knew there was a second No. 4, a troop train, and she knew it was running "five hours and twenty minutes late, Blaisdell to Fort Jones."

She knew there were three sections of No. 85, the *Gulf Coast Merchandise,* that Jack Frost and Bender Johnson were in charge of the first one, that it left Fort Jones at 8.20, and that the other two left twenty minutes apart.

She knew there were a dozen other trains on the road, but because she figured Redhot would be home on first No. 85, she kept track of that one train.

SINCE Blondie was doubling—that is, working both tricks—she had all the office drudgery. During the gloomy evening, she swept the floors, and filled and lighted the order board light, and the station lamps, including the red lantern which old Hank Davis required her and Redhot to keep always burning beside the office door.

She then put the freight bills in the press, and immediately after midnight filed the orders.

While the girl moved about the office, she kept watching over her shoulder, glancing fearfully at the waiting-room window and at the closed door of the freight-room. She had done that ever since she had seen the cot with the corpse on it.

Finishing her work at 1.40, she sat down to eat lunch. The clouds had settled. Snow was falling gently. While she was eating, she heard Paxton—the first open office south—put second No. 4 by at 1.46.

Because she wanted to keep her mind busy with railroad thoughts instead of ghostly ones, she studied the timecard above the table. Train No. 4 was due at Paxton at 8.25. A little figuring showed her that second No. 4 was exactly one minute off the order which had directed it to run five hours and twenty minutes late.

The girl checked down the column of figures, adding five hours and twenty minutes to the time of No. 4 and reading the results aloud between bites of egg sandwich: "Paxton, 1.46; Potter, 1.54; Wilton, 2.03; Creeping Shadows, 2.12. They'll be through here at 2.13," she concluded.

Before she had finished eating, Black Mountain, at the north end of Creeping Shadows Tunnel, called the dispatcher and reported first No. 85 by at 1.49.

She had hoped that first No. 85, with Redhot on the caboose, would come down the hill for second No. 4. Not that it made much difference. She did not mind working the extra hour, but she always felt like she had a friend in town when Redhot was here. After a moment's figuring, she said aloud:

"They can't make it. They'll stay at Moon Valley."

Moon Valley was halfway up the hill, toward Black Mountain. As if in confirmation of her judgment, the dispatcher called Black Mountain.

"Hold second Number Eighty-five," he told the operator. "Frost will be in the hole at Moon Valley with fifty cars. If we let both of them go over there, they'll lay out that second Number Four sawing by."

Black Mountain signalled that he understood. Then instruments fell silent. Wind sobbed and snow pelted softly against the windows. Across the river in the sleeping town, a dog bayed; and from the rough country to the north, a lone wolf sent back a weird, wailing answer.

Blondie's blood began to curdle, and gooseflesh to crawl. She walked the floor. Then she cleaned the lantern globe, went into the waiting-room, stirred the fire, and ventured out on the platform where north wind whispered down the valley.

USUALLY seven switchlights were visible. Tonight there was none—only the cold gray curtain of snow shimmering under the ghostly green reflection from her order board disks.

Blondie thought about the bum killed up by the north switch. A week ago tonight, was it? It seemed like centuries.

Glancing fearfully over her shoulder, the girl started back into her office. As she turned the knob, she observed something wrong. There was no green light shining in the snow. It had been shining only a minute ago. Had her lamp gone out?

Twice since she had been here it had gone out. Both times she had been demerited because she had not kept it burning. Blondie could not afford more demerits. She stepped back where she could see the pole. The light was out. She must relight it.

The op went into the office for a handful of matches. She came out running. This time she was not afraid of ghosts and the night. She was afraid she would not get that lamp burning before second No. 4 ran. She flung herself at the ladder, hurrying up.

Climbing was one chore that Blondie did well. She had learned how climbing blackjack trees in the Missouri hills. She went up like a cat.

When she reached the top of the pole, she knew it was no use trying to light the lamp in the wind. She yanked it out of its socket, carried it down the pole, cleaned the wick, lighted it, and hurried back up with it.

When she had replaced the lamp and made certain it was neither smoking nor dying, she started slowly down the ladder.

She decided that No. 4 would be showing soon. She paused to listen for the whistle. A whistle sounded, but it was not No. 4. Wafted down on the wind came the clear but distant, *Waaaa-waaaa—wau—wahuh* from the north, from up toward Moon Valley.

Instantly she recognized Bender Johnson's peculiar blast. He always "put the English on it," as Redhot said, in a way no other engineer had learned to imitate. Bender was bringing first No. 85 down the hill.

Her first thought was that Redhot was on first No. 85. Her second was: "Why didn't he stay at Moon Valley?"

BLONDIE did not know a lot about railroading, but she knew some things. By the orders and messages she had heard, she knew Bender Johnson had no right coming down in the face of second No. 4 unless the dispatcher had given him another order. There was no other order, because there was no office from which it might have been delivered.

She jumped to the conclusion that he had overlooked his hand. He was *smoking* down the hill.

"That's good!" Revenge whispered. "Railroads fire men for *smoking* over. They'll fire him. It will be good enough for him. He's been trying to get you, now he's slipped himself."

By that time she was on the platform, looking anxiously to north and south. She could see nothing through the snow. She could not hear second No. 4, although it was almost due. She could hear Bender whistling for another curve. He was coming down, and coming fast.

He was more than three miles away. It would be five or six minutes before he arrived. By that time the troop train would have roared past the office, running for the hill. There would be a head-on collision. Men would be killed.

Quickened heartbeat was driving blood rapidly through her brain. Blondie was thinking faster than she had ever thought in her whole life, aiming to avert the catastrophe. It did not occur to her to ask the dispatcher what to do.

Aware that the troop train would go north before Bender came south, she rushed in and set her board against the south. She did not debate which lever to pull this time. She pulled the left one in one swift movement.

Then she started back to the platform. She did not know why. She could think of nothing more to do. As she went into the waiting-room, she saw the red lantern setting by the office door.

Blondie hadn't noticed it before, though Old Hank had required her to keep it always trimmed and burning.

She remembered now his explanation:

"Yuh never know when some hog-head will overlook his hand an' you'll have to do a job of flaggin'."

It was filled now, and burning, and a hoghead had overlooked his hand. She grabbed it up and took it outside with her. She didn't know yet what she was going to do with it, but when she heard Bender Johnson's whistle three miles up the track, she knew.

The troop train would come up the slight grade running fast. Its engineer would not see the order board until he was right into it, because it was snowing. The rails were slick. Maybe he could not stop after he saw it. He might get by the switch and run into first No. 85.

If only she could get up there and stop Johnson . . . With a lantern in each hand, Blondie hit the track running.

An hour ago, she would not have gone up by the spooky switch for all the money in the world. Then she would have remembered there's where the extra had killed the bum. Now she did not even think of it. She was thinking only about getting around the curve and stopping Bender before he hit the troop train.

Past the switch she sped around the curve. It was snowing harder. The wind was blowing terrifically. She was entering the cut a hundred yards from the switch when Bender whistled for the mile board.

His whistle sounded close. He followed the long blast quickly with two short ones—signal that he was going through.

Blondie groaned inwardly. She had hoped he would stop at Creeping Shadows. He wasn't going to do it.

Light broke through the snow, the headlight hurtling toward her. Blondie had been carrying the red light in her left hand. She stopped, shifted it to the right and swung it.

She did not know how many times she swung it; but as she leaped off the track when the engine was fifty feet away, she knew it was not burning.

WHEN Bender whistled for the mile, he was running forty miles an hour, going to Paxton for No. 86. He saw her lantern flash twice at him and go out. At the sight of it, all the meanness went out of him.

He could not see through the snow who was flagging him, but he knew why. The first swing of that red light reminded him of second No. 4 and he guessed it was somewhere down there in the storm.

He sloughed his air through the big hole. The fireman and the brakeman came across the deck.

"Get back there!" Bender cried hoarsely. "Get ready to jump. We're into second Four."

They both went to the gangway, climbed down the steps and waited. Emergency air cut their speed to twenty-five, and to twenty. They were running ten when they went over the switch.

Bender had expected to ram the troop train. He could not understand why he didn't. He could not even see the headlight. He shouted to the brakeman:

"Get that red light and fusee and get down there flagging. Run!"

The brakeman obeyed. Bender whistled out a flagman from the rear, and waited in a blood-sweating frenzy while the brakes pumped off.

Jack Frost did not need anybody to tell him what was wrong, either. When the engineer used emergency air, the conductor braced himself for a head-

on collision and shouted to Skeet and Redhot.

"Hold tight! We're into 'em!"

When the train stopped, he went toward the engine. He met Blondie stumbling back. She was still carrying the two lanterns, but neither of them was lighted.

"I—did I—were you going— Did you get another order—" She was stammering in fear and confusion, but she wasn't crying.

Jack took the unlighted lanterns from her, and caught her right arm.

"Where's that second Number Four?" he asked hoarsely.

"I don't know. I thought—"

"Who told you to come up here and flag us? How did anybody know we'd overlooked 'em?"

Blondie could not answer. They went to the engine together. By the time they got there, Bender had backed up clear of the switch. They headed in; and Bender called in both flagmen. He did not "put the English on" his whistle. He gave straight calls and nothing more.

Jack went with Blondie to the office. The dispatcher was calling when she got there. She had no idea how long he had been calling. He wanted to know if second No. 4 was showing. She answered *not yet*. He told her to call him when it showed. She didn't say anything about first No. 85.

Redhot and both brakemen came in. They all knew the penalty for overlooking an order but were not talking about it.

When they had been in the clear five minutes, second No. 4 whistled. Blondie reported to the dispatcher, and he instructed her to let them go. They passed the office two minutes later with smoke oozing from a hot crank pin, which had laid them out.

JACK wrote a message to Superintendent Sears explaining in four sentences what had happened. He handed it to Blondie with the hoarsely muttered injunction:

"Send that on in, girl. We might as well get it over with."

Redhot glanced anxiously at ner chum.

Blondie read the message but didn't cut in on the wire. She got out of her chair, facing the old conductor and his daughter, with slender hands clasping and unclasping, and tears trickling down her cheeks.

"Isn't there anything—" she quavered.

"Nope," Jack interrupted shortly. "Bender and me overlooked our hand."

"But isn't there some way—to—to fix it, like you did—"

"Nope! There's no use."

"There is, too, Blondie," Redhot interrupted. "Dad, all your life you've been helping other people, covering up their blunders and patching up things for them. I know there's a way to cover this up, if you'll tell her what to do."

"I'll do anything, Mr. Frost," Blondie said fervently. "Anything!"

Jack cleared his throat and glanced around the group. Fifty times in his career he had saved other men's jobs by not telling everything he knew. He had never asked anybody to help him, because he had never been in trouble.

"It could be done, of course," he admitted haltingly. "Any blunder can be covered, if nothing happens."

"Then tell me how to do it."

"It wouldn't be right, child. It wouldn't be fair to you. If they ever found it out they'd fire you."

"It doesn't make any difference, Mr. Frost," said Blondie earnestly. "If it

hadn't been for you and Redhot I'd have been fired before I'd been here a week."

"Come on, Dad!" Redhot urged. "If you don't tell her what to do, I will. There's no use—"

"I'm warning you."

"I'm willing to risk it."

"All right," said the conductor. "We should have stayed at Moon Valley for the second Number Four, but there's not a chance in a thousand that they would have any idea where they would meet us, or even that we were on the road. It will take them eleven minutes to go up. It would take us say fifteen to head out and get down here. They were by here at two thirty-seven. We'll stay here until Black Mountain puts them by. Then we'll pull out, and you can put us by here at, say, three five or three ten. Mind, I'm not asking you to do it; but unless somebody talks, we can get by."

"Nobody will talk," Redhot assured him. "Aside from Blondie and me, nobody but the crew knows it, and with their jobs at stake it's a cinch they're going to keep their heads shut."

BENDER JOHNSON came up the platform and into the office. For a dozen years he had asked neither God nor man for help. Strong, self-reliant, with a job paying good money, he had stood alone and had expected other men to do likewise.

Tonight, however, self-reliance had deserted him. He was not walking with his bold, confident stride. Twenty years' seniority taken from him in one blunder, five children to feed and clothe and nothing to do it with but his hands, he was experiencing a new feeling.

He had to moisten his lips and swallow before he could speak.

"Have you told him the news?" he asked Jack in a tight voice.

"Not yet," the conductor answered.

"You might as well. There's no use monkeyin' around about it."

"You know what it means?"

"Sure! We're fired. That's what they've done to everybody else that's overlooked an order on this pike."

Jack added: "When the officials have found it out, yes."

"They'll find it out, Jack. You can't keep it from 'em."

"They never found out about your overlooking your time that night you went down in the face of Number Six. That's been fourteen years—"

"Yes, but that was before they began hiring—" Bender got red in the face and looked at the female railroaders.

"Listen, boy!" Jack said. "Blondie's going to fix this for us."

"How?"

"She's going to forget that we came in here to meet that second Number Four, and put us by when we pull out at three five."

Bender didn't look at Jack nor at Blondie nor at Redhot. He was staring at his heavy shoes with the snow still clinging to them. Battles were raging down inside his soul.

When the conflict had subsided and he could trust himself to speak, he looked out through the snow-plastered window and, speaking to no one in particular, said penitently:

"If she'll do that for me after I've wrote her up twice in four months, believe me, from here on I'm going to do my part of the railroadin' and let other folks alone—"

"Even female railroaders?" Redhot asked saucily.

"Even female railroaders." Bender grinned. Then, turning to the

others, he growled: "Come on, you guys. Let's get that coal and water so's we can pull out of here as soon as we get down from Moon Valley."

The men went out. Blondie tore up the message Old Jack had written to the superintendent and threw it into the office stove. Though she and Red-hot were both too full for speech, they both knew that Blondie Barr was going to stay on the graveyard trick at Creeping Shadows.

The One-Eyed Engineer

IN all of railroad history we know of only one locomotive engineer who continued in engine service after losing an eye. That man was Aleck Smith—"Dead-Eye Dick"—hogger on the Louisville & Nashville. Records in Master Mechanic Hogan's file at Paris, Tenn., show that Aleck was born in Tishimongo County, Miss., Nov. 17, 1858, and entered L.&N. service is 1873 as brakeman on the Memphis Division. The following year he started firing, was promoted to hostler in 1877, to freight engineer in 1878, and to passenger engineer in 1882.

For many years he had a fast passenger run, "The Cannonball," between Memphis, Tenn., and Bowling Green, Ky. One day in September, 1898, when Aleck was wheeling this crack train at sixty miles an hour his engine sideswiped a freight on a siding at Stanton, Tenn., striking a carload of crossties which had failed to clear the main. His engine jumped the track. Crossties flew in every direction.

Aleck was the only person hurt; a splinter pierced his right eye. They hurried him to a hospital in Memphis, 47 miles away, and surgeons removed the eye. Aleck didn't mind acquiring a glass eye nearly so much as the fear that his throttle-pulling days were over. The thought filled him with gloom. A shyster lawyer urged him to sue the road, but "Dead-Eye Dick" refused.

Shortly afterward, the company found his left eye was as good as ever, so they give him back his old run, on engine No. 28. Well, when Aleck heard the good news he let out a whoop of joy and danced around the room with his wife, Lucy. No doubt he would have gone on a royal spree, but for the fact that he was a teetotaler.

From 1898 until the day of his death, April 1, 1911, Aleck Smith continued to be an efficient engineer. During that time, despite the glass eye, he did not have a single accident. With quiet self-confidence he proved that he could run an engine with one eye as well as he'd ever run with two.

Tom Gideon, a retired N.C.&St.L. hogger of Whiteville, Tenn., told us the other day that he had known "Dead-Eye Dick" for thirty years, and that his friend had a way of making his engine whistle sound like his wife's name, "Lu-u-u-u-ce-E-E-E."

Aleck was about five feet eleven, black-haired, rawboned, and straight as a soldier. His favorite sport was hunting. In 1878 he was presented with a gold medal by the Howard Relief Association for handling the only relief train into Memphis during the yellow fever epidemic that year.—Henry G. Rhodes.

Photo from Collection of Joseph Lavelle

L. & N. Engine No. 25, Similar to the One Operated by "Dead-Eye Dick" Smith

On the Spot

SOME good letters were received in our contest, "How Can Railroads Increase Their Business?" which closed August 1. The judges are now reading them. Winners will be announced as soon as possible.

The big feature of October issue will be "North America's Fastest Runs," by Donald M. Steffee. This will include a comprehensive listing of the speediest start-to-stop passenger runs, based on the latest employees' timetables. Its facts and figures will answer many arguments.

At the same time we will start a series of illustrated write-ups of "Famous Trains That Are Making Good," one each month, beginning with the U.P. "Challenger." This idea was suggested by James C. Southcott, 1452 Sutter St., San Francisco, author of the poem, "Jungle Reverie" (Aug. issue), and the true tale, "Riding the Freight," on which our April cover was based.

Other headliners next month will be "Slippery Buck's Alibi," by Jimmy Earp; an Ed Samples novelette, dealing with engine service; true tales by a couple of old-time boomers, "Turkey" Moore and "Highball John Burns; another Engine Picture Kid story by Johnny Thompson; and an illustrated fact article about a subway train wreck in which 97 were killed.

* * *

EVERY month we list our best-liked stories, etc., in the order of their popularity, as determined by your votes and comments. Readers who don't want to clip the coupon (page 143) can send their choice on a postcard or letter. We are still getting votes on the July issue, but here is the line-up to date:

1—True Tales (all 3 combined)
2—"Footboard Yardmaster," Dellinger
3—"Boomers' Fast Line," Davis
4—By the Light of the Lantern
5—"Circus Daze," E. P. Kid
6—On the Spot
7—"Highball Artists," Hayes
8—"Jay Gould," Edwards
9—International Engine Picture Club
10—The Boomer Trail
11—Missouri & Arkansas Roster
12—"Tariffville Wreck," Critchett
13—"I'll Take the Train," Lyles
14—Model Railroading
15—"First Pacific Type," Currie

The Readers' Viewpoint

I AM very much interested in the historical and mechanical material in RAILROAD STORIES.—EDWARD W. SCHEER, President of the Reading Co. and the Central of N. J.

* * *

I EXPECT to move soon to Fort Worth and may form a railroad historical society there. Now collecting material.—W. E. BUSH (B.R.T. Lodge 837), 58 E. Ave. A, San Angelo, Texas.

(EDITOR'S NOTE: *Why not join the Railway & Locomotive Historical Society, Inc, and organize a Texas chapter? For details write Chas. E. Fisher, president, 6 Orkney Rd., Brookline, Mass.)*

* * *

BRICK DONLEY'S fall from the door of a mail car, as described by Dellinger in "T-Series Mail Key" (June), recalls an incident on the "Q" about 30 years ago.

Train No. 48 pulled into Smithboro, Ill., with baggage car door open, Messenger Bates missing, express safe open. Train backed up 7 miles to meet Bates, who was hoofing it. Working with back to the open door, he had stepped on the metal doorsill and slid out backward while the train was doing about 40 m.p.h. on a curve.—T. M. GRIGO, 5951 S. Tripp Ave., Chicago.

WHO was the engineer and who came with him from Silver Grove, Ky., yard and picked up the man who was dazed in a double-header coal train smash-up Sept. 20, 1920, about 1 A.M., and dumped him in Speers Memorial Hospital at Dayton, Ky.?—C. W. M., care of Mr. Brown, 1163 Oak St., East Side, Toledo, O.

* * *

"BURIED ALIVE," by Parry (June issue), recalls an experience I had while switching. A boy of 16 climbed into a gondola loaded with steel. The load shifted, wedging his leg between the steel and the end of the car. It took us nearly an hour to release him.

Dellinger's Ozark yarns down on the old Frisco bring back a youth I'll never know again. I also enjoy yarns by Pugsley and Titus, especially those with love interest. I'm glad you recognize the fact that women also read RAILROAD STORIES.—DANA MAVITY, 3224 Park 16th St., Moline, Ill.

* * *

CONGRATULATIONS to Stephen P. Breen, 99-A Stuyvesant Ave., Brooklyn, N. Y. He won a silver loving cup in a contest conducted at St. John's University, Brooklyn, for the best story of the year printed in *Sequoya Magazine*. Breen's entry was "Second Wind for the Iron Horse."

Jobs for the Wrecking Master

A Couple of "Cornfield Meets" on the Northern Pacific. (Upper) This Occurred near Hoker, Mont., in February, 1907. The Engines Were Rammed So Tightly, They Had to Be Hauled to the Shops That Way. Photo from Chas. H. Orr, Laurel, Mont. For Details See July "Spot" Department. (Lower) Photo from Lamar Ferguson. See His Letter, Below

Lackawanna Railroad

LACKAWANNA Engine No. 1225, hauling fast freight No. 52 on May 7, 1936, blew up one mile east of Alexander station, 35 miles east of Buffalo. The boiler was hurled into the ditch. Engineer, fireman and head brakeman were killed; and 9 cars of cattle were wrecked, necessitating the killing of 80 cows. —GEO. MANNING, 894 Kensington, Buffalo, N. Y.

* * *

ANSWERING a request for information on the head-on collision near Welland, Wash., on the night of July 17, '35: See photo. Both were N.P. trains: One was a freight, 907, engine 1351, Engr. C. A. Johns. Fireman E. D. Whitney, Condr. W. N. Lewis, Brakemen H. A. Magnuson and F. M. Hubbard. The other train was a passenger, 348, engine 2100, Engr. Stanley J. Cowan, Fireman A. J. Neitzel, Condr. J. B. Holdereid, Brakemen J. A. Harp and Bert Dysart.

For some reason the freight ran past its meeting-point at Slater, and hit the passenger on a curve. Engr. Cowan, 37 yrs. on the N.P., formerly on the White Pass & Yukon Ry. at Skagway, Alaska, was killed; so was Fred Madson, a transient. Fireman Neitzel was badly hurt in jumping. Engr. Johns was sent to the hospital a nervous wreck. One of the engine whistles blew an hour continuously after the cornfield meet.—LAMAR FERGUSON, Hanford, Wash.

INFORMATION wanted on B.&O. wreck in which the Phila. Orchestra was involved at Felton, Pa. Engine was No. 856, manned by Engineer Cy Williamson and Fireman Elliott. They hit an extra freight backing into a siding. I was oil boy at 58th St. roundhouse that night.—JOHN JAHN (engineer), 2229 N. 27th St., Phila., Pa.

* * *

REFERRING to Chick Bliss' "Car That Rerailed Itself" (May issue) I have a clipping that tells of a similar case at Winona, Minn., in April, 1916. A Milwaukee car traveling 25 m.p.h. jumped a derail at an interlocking plant, ran 50 feet on the ties, and climbed back at a battered guard rail.

Answering an inquiry about the Milwaukee wreck at Guttenburg, Ia., Oct. 11, '34: A local passenger train fell into a creek bed 15 feet below. Engr. Charles Strazingsky, Fireman Frank Mann, and 2 passengers were killed. Conductor, brakeman, mail clerk and messenger were injured. —ALDEN E. MILLER, 3448 33rd Ave. S., Minneapolis, Minn.

* * *

ONE night in June train No. 2 left Boston Bar, B. C., with C.N.R. engine 5123, Engr. M. Allen at the throttle and 13 steel cars. Near Copper Creek, 5 miles from Savona, No. 2 found the main line held by a rock. No. 5123 politely tried to step aside, but had to stop on the bank. The tender, equally polite, tried to pass on the other side of the rock and fell into the lake. Passengers were saved from injury by 3 dead coaches next to No. 5123.—R. BRUCE WALKER, Blue River, B. C., Canada.

* * *

WHO can tell about the New Haven wreck at Bridgeport, Conn., in 1914?—C. R. SWEZEY, 795 Briarwood Ave., Bridgeport, Conn.

I WANT facts about a wreck on the "Q" at Indianola, Neb., in May, 1911. I lived near there at the time. After 8 years in railroad service on the U.P. I am now living on a homestead in Alaska.—ARCHIE M. CHASE, Box 711, Juneau, Alaska.

* * *

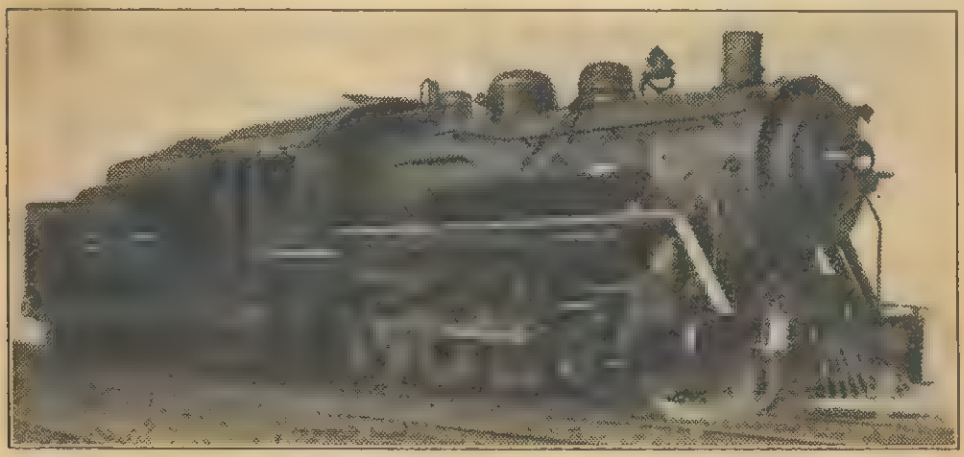
THE wreck of northbound freight train No. 80 on the Southern Ry. near Gurnee Jct., Ala., between Selma and Birmingham, on Feb. 4, this year, came as a terrible blow because my father, Frank Kennamer, was killed in that wreck.

Dad was fireman on the 805, a Consolidation type hog which pulled the train of 22 cars, 15 of them loaded, and the caboose. With Gabe Kelley as hoghead, Allen V. Cleveland was the brains, M. W. Lawley, flagman, and Henry Brown, head shack.

Rain had been falling almost continuously for the first 3 days of Feb. and flood was threatening the iron road. It was Monday, Feb. 3, at 10.45 P.M. when No. 80 rumbled out of Selma on her regular run to Birmingham. As soon as the caboose lights had passed the last switch, Kelley opened the throttle. For 60 miles the freight plodded through a blinding rainstorm and gale.

At 2 P.M. they passed Straven. Rain had stopped, but all eyes were on the alert for rock slides. The engine coasted by milepost 13.5 and neared a high hill. On the right, rain water had formed a little lake; on the left roared Piney Woods Creek, swollen and muddy.

Suddenly the roadbed gave way, slanting the engine down toward the creek. Dad was thrown onto the deck under a deluge of coal. The head brakeman also went to Glory, but the rest of the crew survived. When morning dawned the engine was found turned over on her left side, beneath the tender. Poised above was a car filled with dead and dying cattle. The rest of the train was intact. The head brakeman's watch was stopped at 2.18 A.M., exact time of the wreck.—EARL F. KENNAMER, 2532 Water Ave., Selma, Ala.



Southern Railway Engine No. 805, Photographed by Earl F. Kennamer, Whose Father Was Killed When She Ran Into a Washout near Gurnee Jct., Ala. (See His Letter, Above)

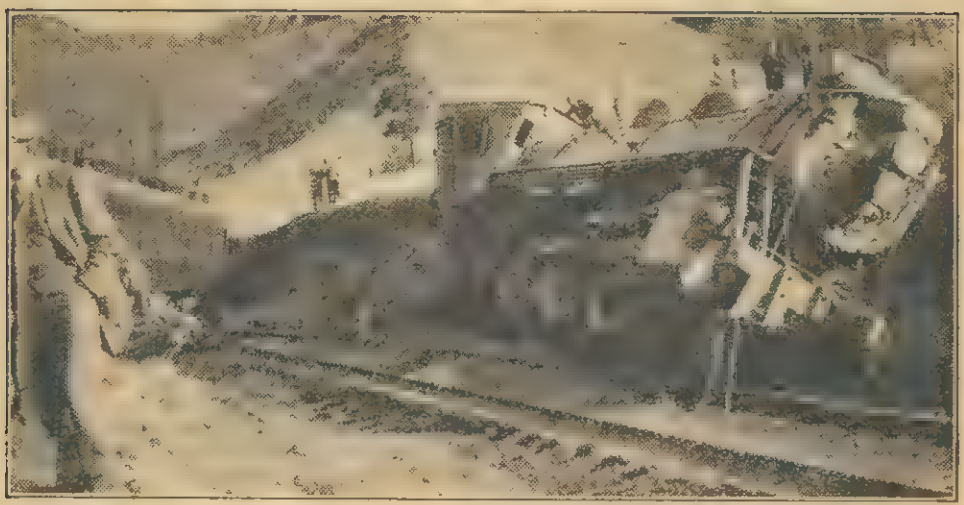


Photo by R. B. Walker (See His Letter, Page 126)

C. N. Engine No. 5123 Hit a Rock near Copper Creek, B. C., with the Result Shown Above

ANSWERING a request for details of the Blue River wreck at Salem, Ind: Train No. 3, on the L.N.A.&C. (now Monon), Chicago to Louisville, left Salem at 6.20 A.M. Dec. 24, 1883. It was foggy and dark, following a heavy snow and rain. The train consisted of combination, smoker, coach and Pullman. One mile from the station the line crossed Blue River, which at that time was a raging torrent. The bridge, 70 feet long, had a slender stone pier in the center, against which a haystack had lodged, forcing the flood downward and undermining the pier; but this could not be seen.

Engine and tender got across and turned over. Combination and smoker smashed against the south abutment, partly in the water. The coach remained on the north side, partly submerged, the sleeper stayed on the track. Wrecked cars caught fire from the stoves and burned. Engr. John Vaughn suffered a broken thigh. His fireman had only minor injuries. Of 38 passengers 9 were killed and 10 injured. John Zahn, bridge supt., was discharged but was reinstated a year later.—FRED B. OTIS, Editor of *Daily Mail*, Bedford, Ind.

IT was alleged in the "Spot" dept. of June issue that the motorman was among the 11 killed on the C.N.S.&M. wreck at Kenosha in Feb., 1930. My father, a lineman on that road, was called for work on that wreck. I am able to say, on his authority, that Motorman Hall was *not* killed, but is living in Lake Forest, Ill.—GORDON MCKINLEY, 325 Ridgeland Ave., Waukegan, Ill.

* * *

SOMEONE in June issue asked about the wreck at Porter, Ind., in 1910, involving Michigan Central and N.Y.C. trains. Porter is about 40 miles east of Chicago. The 2 railroads cross at an angle. At about 5.20 o'clock on a spring evening, the M.C. engineer, running past a red light, hit the N.Y.C. train sidewise, knocking down the signal tower, tool sheds, battery house and switchman's shanty, and tearing up the roadbed. It was the worst wreck I ever saw. Enginemen were killed on the N.Y.C. engine, cab and pilot knocked off and tender crushed flat. One M.C. Pullman was thrown against a telegraph pole, killing 2 passengers.—HARRY WEISS, Fort Pierce, Fla.

Information Booth

CAN anyone give information on Elmer Robinson, engineer on the Wheeling & Lake Erie in '94?—J. A. BERGER, Orange Park, Fla.

* * *

IN July issue I said I'd be glad to give facts about the Burlington Route. Since then I've been pleasantly swamped with mail. All letters will be answered (if stamped envelope is enclosed), so let 'em come.—R. F. ASHBY, Clyde Storehouse, C.B.&Q.R.R., Clyde, Ill.

* * *

WHERE can I buy colored postcards with trains, stations and other railroad views?—JOSEPH FISCHER, 8 Kathryn St., Lynbrook, N. Y.

NELSON BLOUNT and I are writing a book, "Along the Iron Pike," intended to be the answer to the railroad fan's prayer, with plenty of pictures. We need photos, good copy, preferably postcard size, locomotives on all roads, any date since 1850. Scenic background desired. We don't pay for photos but will give full credit for their use. Suggestions for this book will be appreciated. —F. H. RICHARDSON, 29 3rd St., West Barrington, R. I.

(EDITOR'S NOTE: *Mr. Richardson does not say whether or not he has obtained a publisher. Many fine books have been written but never published. We hope this one has good luck.)*

REGARDING "Colorado Midland" article (Aug. issue): An old C.M. engine is still in active service as a switcher at Astoria, Ore., on the S.P.&S. She is one of 4 engines sent from the C.M. during the World War to be used in the spruce camps. They belonged to the Midland's 40 to 48 group. One of them has been scrapped; the other 2 are out of service.

A. V. Coffin of Colorado City, one of the Midland's engineers, came West with the engines and ran them a couple of years. He was my next-door neighbor. About a year ago, through the "Spot" dept., I became acquainted with R. S. McKeage, 1834 S. 52nd Ave., Cicero, Ill., who was also employed by the C.M. years ago and knew these engines well.—H. L. Berry, 819 Ave. E, Seaside, Ore.

* * *

PHOTO of old Forney type Manhattan Elevated engine (June issue) interested me very much. I had one of them under me in 1911 and 1913 on my uncle's logging road in North Carolina. —George L. Barton, Jr., Ph.D. Headmaster, DeVeaux School, Niagara Falls, N. Y.

* * *

JULY issue pictured an old friend I hadn't seen for nearly 50 years — New Haven engine No. 143. Back in '87 the 140's made their debut hauling the N.Y.-Boston express. They created almost as wide a sensation as did those earlier iron horses with dazzling red smokestacks. But, alas! Despite gigantic boilers, they did not steam fast enough to make time, so they were relegated to freight service in and out of Harlem River yard.—Randall Comfort, The Aerie, Chappaqua Mountainside, N. Y.

* * *

REGARDING New Haven engine No. 143: There were 4 of these, 69, 189, 27 and 143, all alike. Cylinders, 19 x 24 inches; drivers, 57 in.; t.f., 19,380 lbs.; wt. on drivers, 91,000 lbs.; total wt. of engine, 108,000 lbs.; tender capacity, 7 tons coal, 3,500 gals. water.

No. 69, later 630, was built at Rhode Is. Works, 1892; condemned July, 1925. No. 189, later 631, R. I. Works, 1892; cond. May, 1925. No. 27, later 632, N. H. shop, 1888, cond. May, 1924. No. 143, later 633, N. H. shop, 1888; cond. July, 1925.

No. 189 ran between New Haven and New London; the other 3 between New Haven, Hartford and Springfield.—D. W. Peckham (pensioned train dispatcher, N.Y.N.H.&H.), Middlefield, Conn.

* * *

THE engine referred to by J.R.S. in June issue, page 137, was 10,000, Baldwin number. She was built by subscription by B.L.E. employees, presented to the Erie, and numbered 499. The Erie built Nos. 500 and 501 from her specifications; but they were failures, although the 499 was rated a good engine. —Leonard Dayton, Newark, O.

* * *

NEAR Owatonna, Minn., Engr. Walter Jones, pulling a Rock Is. passenger train of 8 cars for Minneapolis, saw a pheasant rise ahead and fly toward him. It struck the engine and was knocked aside dead. Then the engine died, for the bird had knocked the whistle off. The train reached Minneapolis 2 hours late.—I. G. Davidson, 4735 Dupont Ave., Minneapolis.

* * *

DELLINGER has created a great character in *Rud Randall*. He is the idol of youngsters who watch from the right-of-way fence. *Rud Randall* stories are more than fiction; they are real.

I like the other rail fiction writers, especially Ed Samples, Earp and Tyler; but I don't like the Engine Picture Kid. Get more true tales. Go after the boomers; make 'em tell the truth, the whole truth and lots of it.—James Cain, 1329 N. Irving Ave., Chicago.

* * *

ANSWERING the inquiry of L. T. Sawvel, of Dubuque, Ia., about the moniker "Tex, K. T.": The original was an old man who carved the moniker with a knife on wood and with hammer and chisel on stone. He is now in Montana State Penitentiary. I knew 4 other so-called "Tex, K. T." bums. One carried a sign-painter's outfit; and every time the train stopped he would daub the letters on everything in sight.

Once we rode a local Milwaukee passenger together. A bull made us get off. Said the bum: "Know who I am?" "No," answered the bull, "and I don't care," and proceeded to beat him.

I showed papers I had, and the bull took me home to dinner. I mowed his lawn, tinkered his car and received $2 on leaving next day.

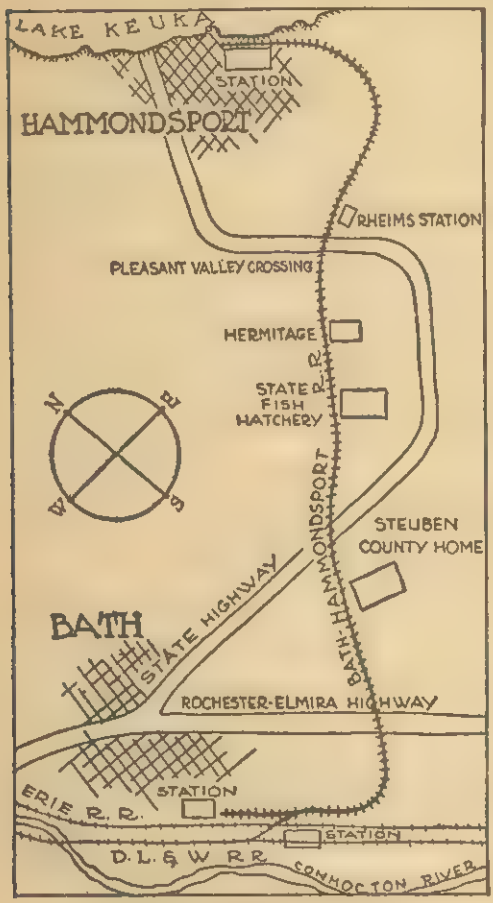
The 3 others I knew who claimed that moniker were just young punks.—Ivan Merritt (known as "Shorty, the Boy Machinist" and "Shorty, the Little Welder"), Liberty, Neb.

* * *

REFERRING to the letter on Diesel engines in June issue: While taking pictures of S.P. engines in the San Francisco roundhouse I had an opportunity to examine a Diesel engine. Designed for distillate fuel, she failed to furnish the required power, so she was changed to use Butane gas by the Atlas Imperial Motor Co. The car was designed to propel only herself, possibly with one trailer, whereas as many as 5 trailers were tied on. With such an overload, failure was to be expected, yet the S.P. had distinguished motor engineers fussing over the car to find out why she wouldn't haul trains.

Butane has a lower compression pressure than gasoline, distillate or oil. When Butane is used in an engine not designed for it, trouble is sure to follow. A Diesel engine has 475 lbs. pressure to compress and ignite the oil; distillate approximately 200 lbs.; gasoline, 125 lbs. A Diesel can never equal the old reliable steam engine. A Diesel must run at a predetermined rate or else precombustion takes place and the motor will not function properly. Steam can turn an engine as fast or as slow as required. This cannot be done with a Diesel or any other combustion engine.—Arthur Watson, 402 E. 26th, S. Tacoma, Wash.

The Last Round-Up



From Times-Union, Rochester, N. Y.

The Revived Bath & Hammondsport Railroad

THE 10-mile Bath & Hammondsport R.R., which ceased operation July, '35, when damaged by floods, will soon resume service. It has been bought from the Erie R.R. by 5 Hammondsport, N. Y., business men and is being repaired and new rolling stock is being acquired. Built as a narrow-gage road in 1873, the B.&H. became part of the Erie in 1890 and was standard-gaged. Present owners are D. W. Putnam, pres.; Robt. Howell, sec.; Chas. Champlin, treas.; Fred Taylor, comptroller; U. S. Arland, mgr. and frt. agt.—W. P. Gordon, 608 Cedarwood Terrace, Rochester, N. Y.

* * *

THE 3¾-mile logging road on which I formerly worked has been abandoned. It was not ballasted. Ties were laid on spruce stringers. Rails were 56 and 70-lb. steel. Grades were 10%, curves 25 and 26 degrees. Equipment included one 50-ton Shay, one 9-ton dinkey, one old G.T. Ry. locomotive and one Marion loader with 21 ft. boom which ran on top of the 6 flat cars. The way loaded trains rolled down that line was hard on weak hearts.—Len A. Snell, Rouyn Inn, Watter's Gold Mine, Canada.

* * *

BRIDGE timber from an abandoned railroad yielded material for a beautiful 5-piece bedroom suite when brought to my furniture factory.—Geo. Wheelock, 523 7th St., Manatee, Fla.

* * *

AMERICA'S queerest railroad, connecting Hayt's Corners, N. Y., with Willard State Hospital for the Insane, was abandoned by the Lehigh Valley on June 30. It had only one locomotive, old No. 4, which was reported to have gone loco herself in 1935 when she disappeared. She was found to have been stolen and run over the branch and abandoned on the main line of the Ithaca-Sayre Division.

* * *

ARE there any engine graveyards around Boston?—Philip Hayes, 463 Somerville Ave., Somerville, Mass.

* * *

SO much is said about *abandonment* of short lines that it may be of interest to hear about one that is giving the big roads a run for their money. The Chesapeake Western Ry., between Elkton, Va., and Bridgewater, Va., 27 miles, was built in 1805. Originally intended to connect coal fields of W. Va. with Chesapeake Bay, it was never completed.

When the depression set in, a truck was bought to start what I think was the original pick-up-and-delivery service. Business increased 500 per cent. Passenger fares were reduced to ½ cent a mile. That so increased passenger business that the road had to retire its open platform cars and buy vestibule cars. Now people leave their autos in their garages and ride the trains.

The first engine bought was No. 101, the *Fannie W. Jackson.* Built by Baldwin, she won first prize at the Chicago World's Fair in 1893. She still rolls a mean wheel over Johnson's Hill, a 4-mile, 2 per cent grade.—C. G. Price (railway photographer), Harrisonburg, Va.

* * *

YEARS ago I heard a story about a L.A.&S.L. passenger train abandoned in the Utah desert. It was alleged that several miles of road had been washed out. The relocation was high and dry several miles from the old line. As it would have cost too much to have moved the equipment to the new road, the train was left standing. Can anyone tell me if there is any foundation to this yarn, and what became of the abandoned train?—H. W. Chambers, 1534 W. 26th St., Des Moines, Ia.

Daughters of the Iron Trail

I AM feeling blue over leaving Chilliwack, B. C. Most of all I miss train meets. RAILROAD STORIES helps me to forget my homesickness. I am glad to see letters from other "Daughters of the Rail."—(MISS) MILDRED BARR, 14 Macleary St., Nanaimo, B. C., Canada.

* * *

FATHER and brother having been railroad men, I was brought up in a railroad atmosphere I have induced a number of girl friends to become interested in RAILROAD STORIES. Your novelettes are a little longer than I enjoy reading. I suggest stories of not more than 5,000 words.—MRS. J. E. CLEARY, 2032 Hightower Drive, Hollywood, Calif.

* * *

I AM trying to locate my ex-husband, Elmer William Gardner, age 40, ruddy complexion, brown hair, gray-blue eyes; 5 ft. 8 in., wt. about 170 lbs.; last heard from in Dec., 1925. He was the father of 2 boys, Donald, who died June 7, 1932, age 10½, and Richard, 16.

Mr. Gardner served as a marine in the World War. He generally works as a railroad detective or as automobile mechanic. He worked on the Rock Island, Santa Fe, E.J &E., Mo.P., and K.C. Southern at Kansas City and Port Arthur.

I want to exchange letters with Western railroad men.—MRS. A. R. GARDNER, 1639 Ballou St., Chicago.

* * *

MISS CARLSON (July "Spot" dept.) told about a C.ofGa. locomotive engineer killed while riding a bus. Well, he wasn't loyal to his road, or he wouldn't have taken the bus.

By way of contrast, take the case of a brother of Mrs. Alice Love, employed by the Milwaukee Road in Seattle. He received a message ordering him to report at Bellingham at a certain hour. He replied that no train was scheduled to arrive there before that hour and, being a railroad man, he had no car but did all traveling by rail. He was then instructed to take the first train. He did so and got a good job without running any risks. —PETER GRAUWEN (member 345 E.R.A.), Bucoda, Wash.

Railroad Dogs

"COALY," a big black Shepherd dog, can board a passenger train going 15 m.p.h. or better. I've seen him do it. He rides engine pilots, caboose and Pullman steps. He likes to load on coach steps, ride until the train is going 18 or 20 m.p.h., then jump off.

One day I rode No. 71, a freight to Morehead, 18 miles, and found Coaly enjoying the scenery from the caboose platform. I helped him onto the first blind of the *George Washington*, on which he sat calmly, occasionally pawing at his eyes when he caught a cinder. Rails of the Ashland and Lexington Division of the C.&O. know him well.—O. W. INGRAHAM and ROBT. HOLBROOKS, JR., Oline Hill, Ky.

* * *

"JOKER" was a terrier pup, my constant companion while I was operator on a Pennsy branch. The supreme thrill of his life was racing trains. Although he never won, he was always ready for the next train. Going to the office one evening we saw a train coming toward us. Joker crouched, apparently intending to ambush that train. As it came near he ran toward it, then turned to race with the locomotive. His foot slipped and he fell with his tail across the rail just in front of the drivers.

Joker took 2 weeks off. He had plenty of time to think things over. Apparently he felt that racing with trains was too much fun to give up. Returning to the job, Joker ignored locomotives. He simply cut them dead. But when the last car of a train had passed, Joker, with a backward glance to make sure it really was the last car, would take after it, hurling insults at it at every jump until he had chased the darned thing clear off the reservation. Then, with head up, tongue out, tail (what there was left of it) erect, he would trot back, conscious of a noble duty well done, to receive the plaudits of the populace.—WALTER PARKER, 159 Hoffman Ave., Trenton, N. J.

* * *

AS a boy in a S. Dakota town I went to the station to see the passenger train on the C.&N.W. come in. I heard a dog yelping. The engineer, oiling 'round, also heard it. Reaching in to oil the links, he found a small bulldog hanging by the skin of his back on a cotter pin at the bottom of a link. The poor creature had been swinging back and forth with the motion of the links. When the engineer released the dog it licked his hand and ran on the platform, apparently uninjured. No one could figure out how it got hung up.—H VAN HORN (fireman, C.St.P.M.&O.), Palisade, Minn.

* * *

ENGR. SHELVEY was waiting at Euston station, London, to take out the Manchester express on the L.&N.W. Ry. when he noticed a half-starved little dog lying on the platform. He called the animal "Shep" and placed him on the rear of the tender.

Thereafter Shelvey rarely traveled anywhere without his dog. Shep proved to be highly intelligent. He could distinguish between red and white lights. When he saw red he would bark furiously to call attention to danger ahead. Al-

though there were many engines of the same type, Shep could tell his own from others. He soon became known all over the system.

On the few occasions when Shelvey was called for a run in the opposite direction, Shep was greatly worried. He would search the engine house and, not finding his master, he would board an engine for London, search the yards there, and then return to Bletchley, tired out.

The comradeship between man and dog lasted 10 years. One November night in 1870, Shelvey ran into the rear of a freight standing at Harrow platform. The signalman had forgotten that he had accepted the freight for the block and left it in the path of the express. Shelvey and 17 passengers were killed. Shep was found standing guard over his master's body.—R. A. BARKER, 528 Riverside Ave., Seattle, Wash.

* * *

WHILE I was employed on the O.&W. we had a magnificent brown, curly-haired dog called "Railroad Dick." He was with us for years. I'll never forget him. In fact, I once composed a little poem in his honor.—C. R. BOHNAU, Box 433, Meriden, Conn.

Bozo Texino

"FOOTBOARD YARDMASTER" (July issue) is the only Dellinger story I've ever voted for on the Reader's Choice coupons which I've been sending in for years. It is a very good yarn; straight railroading, no melodrama or crime stuff.

I note that Dellinger had his boomer switchman in such a hurry that he ran. The only time I ever saw boomer switchmen run was about 15 years ago in the Mo.P. yard at San Antonio. A circus was wintering beside the yard when the whole menagerie broke loose and stampeded around. Switchmen and everyone else ran and climbed telephone poles or anything to get out of the way of lions, tigers, leopards and other beasts. Four switch engines were "on the spot" until the animal trainers took clubs and beat the big cats back into their winter quarters.

Regarding "Railroad Presidents I Have Known," by W. B. Berry (Aug. issue): B. F. Yoakum, failing as a fruit tree peddler, got a job as freight solicitor for the L.-G.N. From that he became receiver of the S.A.&A.P. Then president of the Frisco. It was said he used Frisco earnings to build and promote other roads.

When I began railroading, there was a saying among boomers, "Yoakum frisked the Frisco." He yoked that road with the Rock Island and became president of both roads. At the time he cut loose from the R.I., the stockholders brought suit against him, saying he took all the R.I.'s good rolling stock for the Frisco; but Yoakum won.

As receiver, he built up the S.A.&A.P. and its branches. The road's home terminal—Yoakum, Texas—was named after him. He built the Gulf Coast Lines and many other roads, and died a few years ago, a multi-millionaire.—Bozo TEXINO (Mo.P. engineer), Box 564, Laredo, TEXAS.

* * *

BOZO'S moniker was chalked on the side of a boxcar I unloaded recently, consigned to my employer, John Deere Plow Co.—R. E. HOWSER, 1124 S. 31st, Omaha, Neb.

* * *

I'VE seen Bozo's trademark on a car as far south as the Colonia railroad station in Mexico City.—DAVID DE PORTE, 107 S. Pine Ave., Albany, N. Y.

* * *

WHILE unloading freight for Sears, Roebuck & Co., from N.P. car No. 30090 I saw on the side of the car a figure in a 10-gallon hat labeled "Bozo Texino."—N. MACLURE, 1716 Grand Ave., Ridgewood Park, N. J.

* * *

I SAW Bozo's trademark on both sides of P.R.R. car No. 124483 on May 21 in the yards of the Grasselli Chemical Co. at Spelter, W. Va., where I am weighmaster.—CHAS. WOOD, 748 Hood Ave., Shinnston, W. Va.

* * *

INSIDE a box car I saw Bozo's trademark. It made my feet itch, so that for 2c I'd jump my job running a tractor hoist and take to the road. For years I knocked around the country on freights. I worked down in Bozo's country hauling grapefruit from San Benito to Houston.—JOHN DAYTON, 305 Palisade Park, N. J.

* * *

IN N. Phila. I saw "Bozo Texino" on P.R.R. boxcar 98545.—GEO. SCHOUP, 65 14th St., Hoboken, N. J.

In Old New England

I.E.P.C. members may be interested to learn that Barre & Chelsea saddle-tank engines Nos. 5 and 6 may be scrapped or sold before the summer is over. Hence collectors wanting pictures of these babies should get them while the getting is good. Both are now in service.

No. 6, *Hercules*, built by Baldwin in 1912, was overhauled and given a coat of paint last winter. No. 5, *Monarch*, was built by Baldwin in 1909. Both have 19 x 24-in. cylinders and 51-in. drivers. No. 5 carries 180 lbs. steam pressure and No. 6, 200 lbs. The former has 27,500 lbs. t.f.; the latter, 28,900. These are believed to be the only saddle-tank engines operating in New England. They are to be replaced by B.&M. switchers, series 430, class G11h.

Barre & Chelsea R.R., a B.&M. subsidiary running from Barre to Wetmore-Morse quarry, has

Photo by Elwin K. Heath (See His Letter)

Engine No. 5 on the Barre & Chelsea, Steepest Standard-Gage Cogless Road in the East

the steepest grade of any standard-gage road east of the Mississippi with a ruling grade of 5%. Full train up, one load, 2 empties and caboose, or 9 empties and caboose. Down, 17 cars.—ELWIN K. HEATH, Box 15, Barre, Vt.

* * *

CHELSEA DIV. of the Eastern Mass. St. Rys. was sold June 10 to Boston Elevated Ry. for $1,500,000. This is another step in the motorization of the E.M. system. Main reason for the sale was to bring Revere Beach and Revere into the Boston El's 10c fare zone. Fare used to be 10c on the El plus 10c on the E.M. Some of the old operators have worked for 4 companies: Boston & Northern St. Ry., Bay State St. Ry., E.M. and now Boston El.—RICHARD WONSON, 263 Belmont St., Fall River, Mass.

* * *

LAST summer, bicycling through New England, I had the good fortune to meet Elwin K. Heath, through whom I got a ride on the Barre & Chelsea R.R. He has a marvelous collection of thousands of railroad photos, especially C.Vt. trains and engines. On the same trip I saw Bozo Texino's trademark on a C.Vt. boxcar at Montpelier Jct., Vt.—STERLING WIGGINS, Torresdale, Phila., Pa.

Gould and Harriman

ALTHOUGH the Jay Gould article is readable, I would not have picked it for first place in your July popularity list. Most people would rather read about a nice guy than a skunk. Gould would not seem to have had a single redeeming trait.

Aside from that, much of the old-time financial history of railroading is like a skeleton in the closet. Railroaders may like to know about it, but the rattling of those bones makes sour music. —JOHN A. THOMPSON (author of *Engine Picture Kid* stories), Gilsum, N. H.

* * *

YOUR articles on Harriman and Gould could not have been bettered. "Lantern" dept. and locomotive rosters are on a high level. Dellinger's "Hog Law" (Sept., '35) is the best thing he or anyone else has done in 2 years. The *Boomers' Fast Line* series idea is excellent, though incredible, sometimes approaching burlesque. The *Engine Picture Kid* would be better if he appeared less often.—GEO. BREWSTER, 9433, Queens Village, N. Y.

* * *

"WORLD'S GREATEST RAILROAD MAN," by H. R. Edwards (June issue), is a good article on E. H. Harriman. Here is a bit of professional history no one else would be likely to know. Mr. Edwards said: "For years he (Mr. Harriman) was obliged to wear corsets for spinal trouble caused by his inactive physical life." I had left the railroad and was half through my medical course when Harriman consulted a specialist in Germany. He had a severe case of pernicious anemia. In those days such cases were virtually hopeless. This disease caused a hardening of certain parts of the nervous system and spine with numbness, tingling and weakness. I was interested in his case.—"WOODY" (ex-rail, now a doctor), Honolulu, Hawaii.

* * *

NOW that E. S. Dellinger has once more taken up railroad fiction instead of detective yarns, give him a green board. As for Harriman and Gould, get them together in a cornfield meet and forget to call the big hook. But in fairness to H. R. Edwards, he did a good job exposing that unscrupulous vulture, that wrecker of men and railroads, Jay Gould.

I suppose I am the 999th fellow to mention it, but I can't let pass unchallenged the "Spot" letter from the bus ticket agent who told us that we must "be fair to modern transportation" (July issue). He brought up the question of the Woodstock Bridge disaster and mentioned grade-crossing accidents. Well, Mr. Bus-ticket Agent, let me tell you that motor transportation has done more to improve the business of the undertakers than rails have ever done.—JAMES B. CAIN, 1329 N. Irving Ave., Chicago.

Sun Never Sets on This Empire

IN "Spot" dept., July issue, Geo. Jarvis alleges an L.M.S. 4-6-0 got stuck with 10 cars of coal. I refute his insinuation that all British locomotives are like that old crock. It is not uncommon to see a 20-car train pulled by a little 0-6-0 pannier tank on the Great Western.—B. MURTON, 62a Nevern Sq., Earl's Court, London, S.W. 5, England.

* * *

WHEN I visited the B.&O. Fair of the Iron Horse in 1927 I saw the *King George V* locomotive. She is a neat machine; but, to me, no engine is complete without headlight and pilot, and I have no use for those silly buffers with which all European equipment is adorned. Why don't they do away with their childish manner of coupling? I guess Europe would rather go modern in armament than in anything so civilized as railroading.—BILL FLESHER, Frankfort, O.

* * *

READERS who remember the locomotive *King George V* (G.W. Ry. No. 6000) on her 1927 American tour, may be interested in learning that she and her sister, *King Edward VIII*, No. 6001, were in a smash-up last January.

King George V was hauling a night express from Penzance to Paddington when she ran into the rear of a coal train near Swindon, while running 70 m.p.h. The coal train had broken in two and, being without continuous brakes, the front end proceeded not knowing about the break.

Later, towermen swore they saw the front end pass and she carried tail lights, showing that the train was complete; but they were mistaken. The express engineer and another man were killed.—G. W. A. KEIR, Walpole House, Stowe School, Buckingham, England.

* * *

IN Feb. issue R. White told about electric railway stamps, saying that Sydney Harbor bridge was "supposed to be the world's largest single-arch structure." It is not only "supposed to be," but actually is. It has 2 footways and a single-track highway. The only postoffice on a bridge is situated in one of the pylons, along with a restaurant and some amusement features. The bridge is 2½ miles long, 200 ft. above water.—GILBERT HAYMAN, 166 Macpherson St., Waverley, Sydney, Australia.

* * *

A STREAMLINED Pacific type locomotive weighing 313,600 lbs. with tender has been built for the South Australian Rys. for use on the *East-West Express* on the Adelaide-Port Pirie Division.

The North Commercial Limited, between Sydney and Newcastle, 104 miles, set a new record by doing the distance in 2 hours 10 minutes, averaging 48 m.p.h.—R. J. ACKLAND, 9A Royalist Rd., Cremorne, Sydney, Australia.

C.N.R. engine No. 5528, pictured with Curran's article in June issue, was originally Intercolonial Ry., built in 1906 at Montreal, one of the second batch of Pacifics in Canada.

The first batch, numbered I.C. 313 to 324, now C.N.R. 5500 to 5511, were built at Kingston in 1905, to same specifications as No. 5528, with 22x28-in. cyls. and 72-in. drivers, 200 lbs. pressure, and 29,000 lbs. t.f. For years they hauled the crack trains on the I.C. but were gradually replaced by heavier Pacifics which, in turn, were replaced by 4-8-2's in 1923. Most of the 4-6-2's are still hauling secondary trains. A number of these small Pacifics are stored here. Boilers on most of them are pretty well gone. —MENDELL GREENBLATT, 192-196 Robinson St., Moncton, N. B., Canada.

* * *

CANADIAN TRAVEL BUREAU, Dept. of Railways and Canals, Ottawa, Canada, has just published for free distribution a booklet of travel information.

* * *

ISN'T it about time the *E. P. Kid* and *Goldenrod* were hitched? I wish my girl friend and I could travel around together as they do. I was born in Pretoria, South Africa.—W. W. MALLINSON, Camp 412, Princeton, B. C., Canada.

* * *

I WANT to hear from railroad men in U. S. and Canada, especially engineers and firemen on fast runs. I often look at pictures of your large, modern power and try to imagine what it looks like on the footplate at 50 m.p.h. Tell me about it. The New Zealand Lines have some American Pacifics, imported around 1912, hauling heavy freight in mountainous country. Good luck to E. S. Dellinger! He is one railway author I'd like to meet.—E. J. LAMBERT, Carrington Road, New Plymouth, New Zealand.

* * *

EIGHT miles south of my home a passenger train ran into the rear of an express, plowing through the brake van, stopping with the end of the car on the engine. That was 3 years ago. Three years earlier, a motorcar with 6 nurses crashed into a train at the same spot, killing 8 persons and injuring several others. Roundhouses here are called "cleaning sheds."—ROBT. BUTCHER, 11 Rosewarne St., Christchurch S.W. 1, New Zealand.

* * *

MY grandfather, Wattie Marston, was an engine driver for more than 30 years after 9 years working up to that position. He was chairman of the Locomotive Engine Drivers & Firemen's Association (Victoria). My most treasured possessions are his watch and a certificate presented to him by the Ass'n.—W. H. LARSEN, 64 Hedderwick St., Essendon W. 5, Melbourne, Victoria, Australia.

The Big Seven Route

By DAVID MARSHALL

THE Great Marshalcy Railroad, complete with about everything but an RFC loan, is owned by John, Tom, Mary, David, Brendan, Margaret and Walter Marshall; and, quite appropriately, it operates between the seven cities of Johnstown, Thomasville, Marymount, St. David's, Brendana, Margaretville and Walteria. This circumstance led the patrons of the road to call it, almost from the very start, "the Big Seven Route." An alert board of directors caught up the idea, and in combination with a large figure 7, the nickname is now painted on all the company's freight-cars.

The railroad's three passenger and freight terminals are at Johnstown, Thomasville and Marymount, and these three cities lie at the points of a roughly triangular system. Every passenger terminal has three tracks and enough switches to make it possible to send a train from any track to any other point on the whole system. All of which is made plain in the accompanying railroad map of the Marshalcy.

But where—and what—is the Marshalcy? A fair question, Friend, and the answer is this: The Marshalcy is in South Orange, New Jersey. It is that portion of an old-fashioned home that is marked off and reserved as a playground for the seven kids who live there, the same seven listed above. I live there, too, and those seven kids are mine. So I'm the company's general superintendent of maintenance, repairs and purchase. And this, therefore, is a rather personal story.

In telling it, however, I shall leave much to the map (see page 136) and deal only with the unusual features of the Big Seven. I have suggested some of these: Walteria, for example, is close to Johnstown, and the youngest boy is under the eye of the eldest.

And as every city is named after one of the stockholders, so, in one way or another, is every last piece of equipment. Thus the chair-cars and sleepers are Bluey, Springs, Curley, Brownie, and so forth; and the company's two oldest locomotives are 625 and 831, for June 25 and August 31 are the birthdays, respectively, of John and Tom.

Day coaches and freight car numbers were found in similar ways: by counting the number of days from January 1 to each birthday; by taking the year in which a stockholder was born; or by counting the number of letters in his name. So, too, the corner-stone of the passenger terminal at Marymount reads 1929—not because the station dates from that year, but because Mary does.

But the most important thing about the Big Seven is the way it's operated, and the most important thing about its operation is that everything depends upon the operators. Almost nothing is automatic. The system is broken up into seven divisions—the three terminal divisions, JT, TT and MT, and four main-line divisions, WA, SD, MV, and BA.

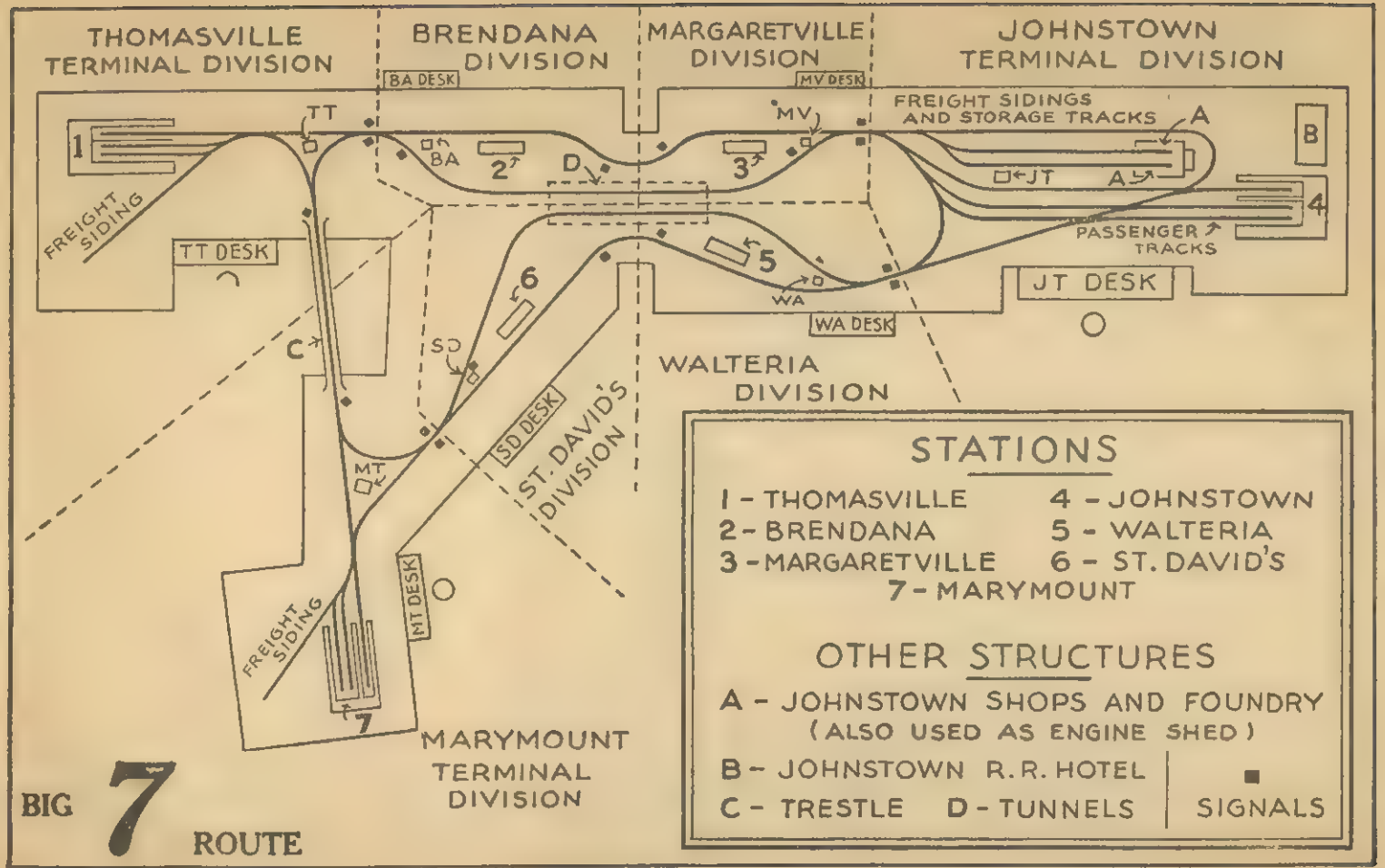
Along the right-of-way are seven signal towers, one for each division and each one a scale model; and all these are connected by the usual telegraph wires. But inside every tower the wires are brought together in a bunch, properly insulated, and the

David Marshall, Jr., Has Charge of the St. David's Division of the Great Marshalcy Railroad (the Big Seven Route) in South Orange, N. J., but at the Time This Photo Was Taken He Was Substituting at JT Desk on the Johnstown Terminal Division (See Map on Page 136)

bunch is then passed through a hole in the platform, and carried under the platform to a small desk. There are seven desks, one for each tower, and from these seven separate "towers" every signal is set, every frog is turned, and every train movement is controlled. In short, there is something very important for everybody to do.

And just as everybody has his own division to look after, so nobody has any control whatever beyond the limits of his own division. But the tiny telegraph wires that run alongside the tracks are real. Through them, the towers are all connected. There is a system of bells, and every tower is run according to standard railroad practice. The "towerman" has to OS every train—and terrible things can happen if anybody makes a mistake.

So every stockholder on the Big Seven is also a towerman. That is not to say that he merely runs a tower. He also operates every train within the limits of his division, for he controls the "juice" as well as frogs and signals. And every division is broken up into sections, and every section is insulated from every other section, so that within a single division as many as four trains can be controlled separately. From the transformer four separate wires pass through four separate switches at every desk, and thus the juice is carried to each of the four sections of track in each division separately.


THOMASVILLE TERMINAL DIVISION
BRENDANA DIVISION
MARGARETVILLE DIVISION
JOHNSTOWN TERMINAL DIVISION
BA DESK
MV DESK
TT
MV
FREIGHT SIDINGS AND STORAGE TRACKS
A
B
1
BA
2
D
3
JT
A
4
FREIGHT SIDING
TT DESK
PASSENGER TRACKS
5
6
WA
JT DESK
WA DESK
C
SD
WALTERIA DIVISION
SD DESK
ST. DAVID'S DIVISION
MT
MT DESK
FREIGHT SIDING
7
MARYMOUNT TERMINAL DIVISION
BIG 7 ROUTE
STATIONS
1 - THOMASVILLE
2 - BRENDANA
3 - MARGARETVILLE
4 - JOHNSTOWN
5 - WALTERIA
6 - ST. DAVID'S
7 - MARYMOUNT
OTHER STRUCTURES
A - JOHNSTOWN SHOPS AND FOUNDRY
(ALSO USED AS ENGINE SHED)
B - JOHNSTOWN R.R. HOTEL
C - TRESTLE
D - TUNNELS
■ SIGNALS

FOR some time Walter will be officially out of it, for want of years and wisdom; and Margaret is satisfied to admire the spectacle from a safe distance. So WA and MV are temporarily hooked up to the desk at SD, and there David is the boss of three whole divisions. Time was when David used to complain that he was a big enough boy to have a terminal, but that's all forgotten now, and nothing could lure him away from SD.

To operate in this fashion requires, of course, that everything be done according to schedule. A timetable may be useful; I'd like to work one out with a clock that ticks off an hour every ten minutes or so. But a schedule in which all movements are listed in their proper order is an absolute necessity, for the towerman must know the identity of every train if he is to throw the proper switches. And how many different switches have to be thrown is suggested by the passenger service out of Johnstown alone:

Trains	201	301	231	321	261	361
Sta. stops (abb.)	MV BA TT	WA SD MT	WA SD TT	MV BA MT	MV BA SD WA TT	WA SD BA MV MT

The system of numbering trains is perhaps apparent. The first figure shows where she's going, and the last shows where she's from. The middle figure indicates the route, which may be direct, indirect, or —let us say—highly convoluted. There are eighteen different route combinations, six out of each terminal. Considering which, it may be granted that operator at SD has his hands fu'

The terminal operators have a different kind of job. Thus the day begins at JT:

1. Dispatch No. 201 from Track 2.
2. No. 103 arrives on Track 1.
3. Dispatch No. 321 from Track 3.
4. Back No. 103 out of Track 1 to storage track.
5. No. 162 arrives on Track 2.
6. Pull No. 103 out of storage track onto main-line. When last car is clear of the Y, back train into Track 3. This train now becomes No. 231.
7. No. 123 arrives on Track 1.
8. Dispatch No. 231 from Track 3.
9. Freight train arrives in yard, receiving track.

Once in a great while John gets out of step at JT, and then indeed it's time for Finnegan to write to Flanagan. For even if it stays on the track, an extra train at the wrong minute can surely "muddle things up to the divil and back."

But the OS system goes a long way towards preventing that. You can't move a train out of your division into somebody else's division unless the towerman ahead gives you one bell and a green light over the tracks—both. And if there's any mistake about your train, the chances are two to one that you get four bells back and a red light.

THE Big Seven may be set down technically as an O-gage tinplate road, though we have some aluminum, and the tin trackage is not the ordinary three-rail affair put out by the electric train manufacturers. We have some of that three-rail track, too. We have done our best to hide it under tunnels, for the general effect of it is to destroy the railroad's look of reality. Our substitute for it is not altogether perfect-looking, but at least it's miles cheaper and it eliminates the third rail by using a much less obvious cable instead.

Ignorant, at that time, of how cheaply aluminum or brass rails could be bought, we purchased at five cents a section a quantity of the two-rail tinplate that is made for clock-work trains. The tinplate ties we left alone, but we added wooden ties, and nailed the rails firmly to the wood and right through the wood to the platform on which the system is built. Then we painted the tin ties to resemble the stained wooden ties, and we painted the rails to resemble steel—not black, but a kind of fawn color—save on top where the electrical contact had to be kept sure. Up to this point we had a permanent way that only clock-work trains could run over.

To carry the juice for electric trains, we simply strung a wire along, midway be-

tween the tracks and rail high. And the effect, as I have said, is to make the road-bed look immensely more real. We used the thinnest wire that would do the job—the salesman said it was steel. Anyhow, it was quite cheap and it is quite unobtrusive. This is how we strung it along:

We used one-inch 'scutcheon nails. To avoid splitting any ties, we drove them into the platform between ties. On curves we had to keep them close together. On the straight-away, we spread them twelve or fourteen inches apart. Each nail we hammered in firmly, hit it hard and hit it straight, midway between the tracks, till the head of the nail was track high. Then we drove it just a little bit further in, to make up the thickness of the wire.

Next, we painted the nail head with a liquid flux, and then we dropped a bit of solder squarely on the head. When all the nails had each a bit of solder, we touched up the wire with flux, and laid one end on top of the solder on the first nail. Then we laid a hot iron on top of the wire—just for an instant. The heat passed through the wire, melting the solder, and as we felt the wire sinking through to the nail-head, we quickly pulled the iron away. Thus the wire was "sweat-soldered" to the nail, and thus, step by step, it was drawn taut and fixed to the head of every succeeding nail.

OUT of this tinplate trackage costing five cents a throw, we also made our own switches, identically like the split-switches in use on almost every Eastern railroad, save that ours branch off at a somewhat sharper angle. They turned out to be very easy things to make.

What they amount to is merely splicing two pairs of track together. We got an excellent diagram of a split-switch out of the encyclopedia, and we laid out dozens of them on as many sheets of card-board, drawing each one the exact size of the switches we were about to make. Then on top of one drawing, all at their proper intervals, we glued down the wooden ties. In between the ties, we could still see all the essential lines of the drawing.

We laid down a straight pair of rails, three tin ties included, getting each rail directly above its corresponding line of the sketch. We sawed off the inside rail at an angle, just above the junction we had pencil-marked below. We took a pair of curved rails and, as closely as we could, fitted them into place.

We marked the outer curve where it touched the cut rail. And then we sawed this off to correspond, and fitting them together snugly, we nailed down firmly what remained of our two pairs of track. The sawed-off rails came together to make a point, and to join them neatly, a file came in handy, and so did a few occasional drops of solder.

Thus far we had completed the fixed or immovable parts of the switch, and we had two rail segments left over. These latter became the movable parts. To get a good close fit to the immovable rail, the outer side of each pivoted part was filed away at the swinging end. At the pivot end, a hole was made in the inside toe. A round-headed screw became the pivot, driven well into the wooden tie.

And to hook the two movable parts together, about two-thirds of the way from the pivots, we used a brass rod one-eighth of an inch square. This passed underneath the rails, in the interval between two ties, and it was long enough to extend out beyond each of the immovable tracks.

The movable parts were attached to it, each by a single bolt, and the bolt was loose enough to allow a little pivoting, but tight enough to clamp the movable rails down firmly upon the ties. The brass rod also moves them back and forth, for strings and wires tie it up to the proper lever at the nearby tower-desk.

The switches are thus operated by hand, and—what is worth noticing—they are completely insulated from the tracks that carry juice. They have no third rail nor even a cable. How then does a train carry across? As smoothly as can be; for the last coach or caboose of every train has a shoe in contact with the power cable, and from this extreme end of the train the cur-

Photo by R. D. Ward, 2 Irving Pl., New Rochelle, N. Y.

One of the Finest Miniature Railroad Systems in America Is This One at Headquarters of the Westchester Model Club, Inc. (Details on Page 142)

rent is carried along under each car to the locomotive, by way of a rubber-insulated wire, dressed up to resemble a compressed air hose. Thus the flow of current is not interrupted when the locomotive passes over an insulated switch.

How about the grounding? That is effected through the couplers and the wheels of cars or coaches over the whole length of the train.

AND this brings us to the one device we have which is automatic. Its purpose is to check the excessive speed of trains at the end of a long tangent, just before a switch or a curve. The device is ridiculously simple. For a brief space the power cable is carried along the ties, below the reach of the locomotive shoe. An engine running alone out of the curve can just clear the space without stopping completely. An engine with a load receives power from its train, precisely as if it were passing over one of our insulated switches. Then that contact in turn is broken as the rear car passes over a shorter but similar depression of the power cable further up the track.

So, taken all in all, the Big Seven is not an ordinary tinplater. Another mark of distinction is the fact that all our passenger equipment and most of our freight cars were made to scale in our own Johnstown shops. Several freight cars we bought, when the system was much younger. On checking this over, we have found it to be only slightly longer than scale, so we have kept it all. Still, we have not painted our name on any of this purchased equipment, but in repainting it, we have dressed up every piece as if it belonged to one of our great American railroads. Thus a refrigerator car with a sky-blue roof was rebuilt along these lines:

The plate bearing the manufacturer's trade-mark was removed. The depression out of which it was torn was generously scratched and roughened, and then filled in with iron-cement. Emery paper smoothed

it off. The roof was painted a dull box-car red. The sides were done in yellow, and the ladders and brake-wheel in black. The journals were painted a dark brown, and so were the outside faces of all the wheels.

Printed on good paper in monthly magazines, we found several advertisements of the Burlington Route, each containing that company's device, the black oblong piece with white lettering. We clipped these out carefully, and finally we had two that were approximately the correct size. Each of these we glued to the side of the car within a millimeter of its correct place.

Then we had a printer do the numbering for us in black ink on strips of yellow paper, and these in turn were glued to the car. A little fine sandpapering and a litle retouching with a paint brush, and you'd never trace the outlines of the paper. And finally, to protect the paper and give it all a touch of glamour, we varnished the whole job.

ALL the purchased equipment is thus done up as "foreign" rolling stock. The Big Seven's own cars are made from diagrams and specifications supplied us for the asking by the publicity department of the Lackawanna Railroad, which runs only about 200 yards away from our house.

We purchased all our wheels and journals, and the coach bodies we made of wood, glass and thirty-second inch brass ribbon. They are solid wood below the window sills and solid wood above the lintels. These two wooden parts are separated by wooden blocks, one at each end of the coach, just inside the platform, where they do not show. They are bolted together, the bolt in each instance passing through one of the blocks.

The Model Trading Post

ITEMS are printed FREE in this department. Keep them short and write plainly. We are not responsible for mistakes in connection with letters that are hard to read. Material for publication in Nov. issue must be received before Aug. 15.

QUERIES about modelmaking, where to buy materials, etc., answered free if you write to A. C. Kalmbach, editor of "The Model Railroader," Wauwatosa, Wis.

ALWAYS use 2c. reply postalcard or enclose self-addressed stamped envelope when writing to any name listed here. Many readers refuse to answer those who neglect this courtesy.

* * *

I OFFER photos, B.R.T. magazines and buttons, Ives O-gage trucks, N.W.P. employees' timetables and train orders for ¼" scale eqpt., finished or parts.—Jack Trego, Crannell, Calif.

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Send for your copy today of AMERICA'S MOST COMPLETE catalog of ¼" scale equipment 25c, 38 pages, 8½"x11". Full of locos, cars, track, construction kits, etc. Buy from the oldest firm handling "O" gauge exclusively.
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WANTED: Ives 120 series, 9½" frt. cars. Send details and price.—G. E. Condey, 5329 Skillman Ave., Woodside, L. I., N. Y.

* * *

LIONEL O-gage pass. cars Nos. 600, 601, 602; new No. 259 steam-type loco and type B multivolt transformer offered in trade for HO-gage loco or a modelmaker's lathe.—Alfred Neusser, 31-30 94th St., Jackson Heights, L. I., N. Y.

* * *

LIONEL std.-gage equipt. offered for what have you. (List too long to print here.)—Wayne Frost, 119 Pennock Ave., Upper Darby, Pa.

* * *

OLD issue of model and railroad mags. offered in trade for elec. equipt. Also scale model loco wheels 2½" gage; tender wheels 1", front truck wheels ¾", made by Bassett Lowke, Ltd.—R. H. Dayas, Alexander, Man., Canada.

* * *

I WILL trade Lionel caboose No. 217 for Lionel car No. 214 or other Lionel eqpt. Want to hear from anyone who has No. 440 bridge signal Lionel Pullmans and obs. cars in classes 412 to 416, 420 to 426. What offer for Lionel '14 catalog?—J. M. Tracey, 4910 8th Ave., Sacramento, Calif.

* * *

WANTED: Any sort of 16 mm. motion-picture film and eqpt. for Lionel elec. loco No. 252; rolling stock, Lionel mul. transf. type B, 23 pcs. strt. track and accessories.—Lawrence Hrouda, 1749 E. 17th St., Brooklyn, N. Y.

* * *

I OFFER Lionel O-gage mech. eqpt. for what have you.—Stanley Norman, 7 Marble St., Hot Springs, Ark.

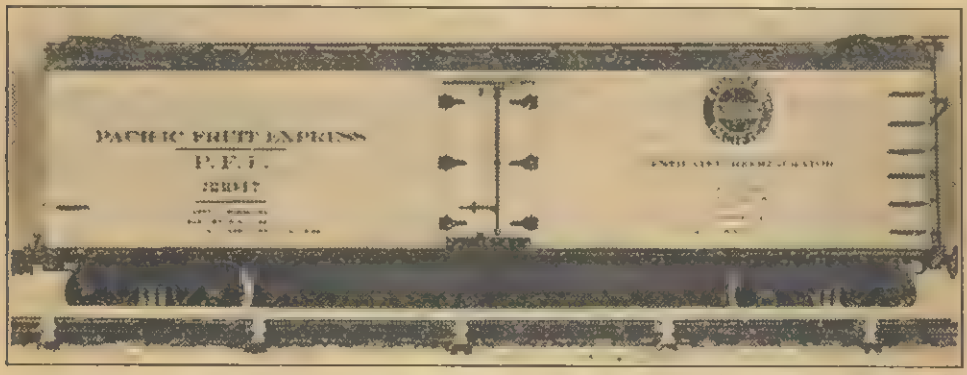
* * *

BOOK, "Baldwin Narrow-Gage Locomotives," published in 1877 with rare old builder's photos pasted in, for sale; or will trade for ¼" or 17/64" model loco.—Clyton Pettis, 5815 W. Race Ave., Chicago.

* * *

I HAVE a musical saw and bow to trade for wide-gage train or eqpt.—J. D. Copeland, 8420 Kenton Ave., Niles Center, Ill.

Live Steamer, Milwaukee No. 6100, ½-Inch Scale, Assembled by Lester Glass, Sac City, Iowa



Wooden-Body ¼-Inch Scale "Reefer" Made by Howell Day, 292 Vail Ave., Dunellen, N. J.

Model of Pennsy Engine, Class P (D-11c), ¼-Inch Scale, O-Gage, Built by E. P. Alexander

Photo from Paul Standard, C. P. R. Press Representative, 342 Madison Ave., N. Y. City

Sidney Woods's Working Model of Canadian Pacific No. 2700. (Details on Page 142)

WANTED: Buddy or Erector loco, good cond. Name price.—C. R. Anderson, 2943 23d Ave., Oakland, Calif.

* * *

CASH offered for 2 Lionel reefers No. 514R or boxcar No. 514, good cond.—T. R. Dunn, 254 Hayward St., Yonkers, N. Y.

* * *

WILL sell Lionel std.-gage loco and rolling stock for cash or will trade for OO-gage eqpt.—Jas. Tilford, St. Paul's School, Concord, N. H.

* * *

I OFFER various railroad booklets, mags., etc. (list too long to print here), in exchange for ¼" loco and cars.—H. Hazel, 105 E. 100th St., N. Y. City.

* * *

WANTED: ¼" scale, 72" drivers and eqpt. Also Santa Fe blueprints. For sale or trade, out-of-print "Model Craftsman" and model railroad books.—G. R. Warins, 24 Julian St., Roxbury, Mass.

* * *

LEE P. RIDGMAN, editor and publisher of "Model Railroaders' Digest," 107 E. Broadway, Hawthorne, Calif., is putting it out as a live 8-page monthly magazine for tinplate fans at $1 a year. We're watching it grow.

* * *

I OFFER 400E loco; No. 9E loco; 4 prs. switches; pass. cars Nos. 418, 419, 490; frt. cars Nos. 214 and 517, and other accessories, total value $300, in exchange for ¼" scale model elec. eqpt. (P.R.R., if possible), good cond.—Robt. Shoemaker, 5215 Kenwood Ave., Chicago.

* * *

WANTED: O-gage locos, cars, switches, signals, track, in exchange for indoor golf set, radio guide, tube tester, motormeter, tools. I offer std.-gage outfit for cash.—C. E. Edwards, 306 E. Main St., Barnesville, O.

* * *

I OFFER to trade a 4-vol. set "Audels Plumbers & Builders Guides" for old toy loco or used toy train, fair cond.—C. L. Bandy, Jr., Box 105, Russell, Ky.

* * *

WANTED: English type 6-wheel tender in tinplate, O-gage, not scale model. Condition of paint no consideration.—Jasper N. Walton, 416 Walnut St., Phila., Pa.

* * *

WHAT am I offered for ¼" scale Penn automobile car No. 60595 painted boxcar red?—Harold Gaebe, Desloge, Mo.

* * *

HIGHEST offer of ¼" scale eqpt. gets my collection of 200 timetables from 40 roads.—Howard Lynch, 386 E. 12th St., Brooklyn, N. Y.

* * *

WANTED: ¼" scale Hudson type loco, wood or iron, for display purposes; 10-wheel or Mt. type pass. Have Winchester rifle, old shotgun, old coins, other curios. Write.—Jas. T. McGarr, 4516 Huntington, Covington, Ky.

* * *

WHAT offers for live-steam working model 4-4-0 loco and tender, 1¼x2" cyls., 6" drivers, copper and brass boiler, copper flues, Stephenson link valve gear, 5" gage. Resembles P.R.R. D16b. Also 4-6-2 loco chassis 1½x2" cyls. 6" drivers, Walscht. valve gear, 5" gage. Set "R.R. Stories," Apr., 1930 to date.—H. W. Clutter, Clayville, Pa., R. D. 3.

Model Engineers and Clubs

WESTCHESTER MODEL CLUB, INC., made a favorable impression at its first annual show at headquarters, 555 Main St., New Rochelle, N. Y. The display included a miniature railroad system with 70 ft. of tracks, and scores of models of locos, cars, even boats and airplanes.

A novelty feature was the use of the system to haul sandwiches, etc., from the kitchen to the exhibit rooms. Background (see page 139) is a realistic mural depicting a Cleveland rolling mill, painted by Miss Violet Alexander, 30 Avon Road, New Rochelle. Her brother, Edwin P., is president of the club and has frequently contributed model-building articles to "Railroad Stories," etc.

Among the local exhibitors, in addition to President Alexander, were Fletcher C. Speed, John F. Cox, Wm. C. Poellmitz, Chas. Newman, John Riskus, Chas. F. Schminke, Rudolph Mees, Fred Mitchell, R. D. Ward, and S. L. H. Ward, Jr.

Mr. Speed showed his scale model of the famous "DeWitt Clinton," first passenger train operated on the old Mohawk & Hudson R.R. (now N.Y.C.) in 1831. This model, including the engine, tender, and 3 bright green cars, was made from 200 parts, all hand-turned. It has taken several prizes.

Chas. A. Penn, publisher of "Model Craftsmen Magazine," 454 Pelhamdale Ave., Pelham Manor, N. Y., exhibited what he termed "the world's smallest steam engine." She runs inside a thimble, requiring 10 drops of water and 8 drops of alcohol to operate. A tiny arm on top, part of a watch, spins back and forth when the engine is under steam.

Earl Gillespie, of Hollis, N. Y., had a fine model of the L.I.R.R. "Shinnecock Express." Frank N. Braisted, Jr., also of Hollis, showed his smooth-working, air-conditioned, café-lounge car "L. Edwin Moon." G. A. Vaughan, of College Point, N. Y., displayed a loco completely worked in brass, with tender and caboose of aluminum trim.

MILWAUKEE Union Terminal R.R., O-gage model road, is operated by the Model R.R. Club of Milwaukee as close to standard rules as possible. Stations are named after actual locations on a map. The dispatcher is located in another room so he does not have his illusion spoiled by seeing the whole line spread out before him. Men have rights same as on the real thing.—A. C. Kalmbach, Wauwatosa, Wis.

* * *

UNDER construction for the Silver Lake R.R., my model pike, are 24 freight cars. All are scale except 6 cattle cars for which I have no plans. Cars are 4 Pa. box, 2 R.I. reefers, 2 Silver Lake (my own design), 3 Burlington gondolas, 3 U.P. gondolas, 2 W. Md. 70 ft. gondolas, 2 Heinz pickle tank cars, and 6 cattle cars.—Joseph Fischer, Lynbrook, N. Y.

* * *

CEDAR RIVER VALLEY & WESTERN, my railroad, has 200 ft. of track, 3 locos and 10 pieces of rolling stock. I want to hear from other boys who operate steam-driven models.—Edward Kaseman, Jr., Wheelerville, Pa.

* * *

ATLANTIC NORTHERN R.R., HO-gage, is ready to begin construction in a basement 10'x12'. Motive power will consist of a 4-6-0, built from plans recently published in "Railroad Stories"; also a 4-4-0, 2-8-0, 0-6-0, 2-6-0, 4-4-2, and a gas electric.—Alfred Neusser, G.M., 31-30 94th St., Jackson Heights, L. I., N. Y.

* * *

IN 1,100 hours Sidney Woods, 1080 Keith Road, W. Vancouver, B. C., Canada, built a working model of a C.P.R. class 2700 locomotive. (See photo.) She is on a scale of ⅜" to the foot, is 4 ft. 2 inches long and weighs less than 100 lbs. She is an oilburner and raises 50 pounds of steam in 15 minutes. Will haul 4 adults. Mr. Woods is a garage mechanic. He was formerly president of the B. C. Society of Model & Experimental Engineers.

* * *

DIAMOND VALLEY R.R. having been

RAILROAD STORIES Reader's Choice
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Stories, features and departments I like best in the September issue are:

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All titles must be received at this office before 5 p.m., September 15, 1936. Everybody eligible except employees of The Frank A. Munsey Co. and their families. Each contestant limited to one title.

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Winning titles will be selected on the basis of cleverness and originality. Judges will be Freeman H. Hubbard, Editor of RAILROAD STORIES; G. H. Burck, Associate Editor, and C. Howard Tate, Art Director.

crowded out by trucks, will be transferred to a new location in our new home. It consists of 75 ft. of track equipped with 2 locos, 13 frt. cars, 3 pass. cars, with 5 box cars and 2 baggage cars under construction on a Govt. loan. I want to hear from anyone interested in model railroading in this vicinity.—Otto P. Rhein, 1440 Cloverdale St., Seattle, Wash.

* * *

WHY shouldn't juice fans have models? Very soon the street car will be a thing of the past and models thereof will have an increasing value like models of old ships, Conestoga wagons, etc. Why shouldn't street-car model enthusiasts form a club?—Paul Willis, 1737 N. 19th St., Phila., Pa.

* * *

I WANT to get in touch with model railroaders. I need pointers in starting a pike of my own.—Ralph Orth, Gen. Del., Charlestown, W. Va.

PIPE GAVE THE BUCK FEVER!

BOYS, we see no sport in gassing deer with a gooey old pipe filled with garlicy tobacco. But we see a lot of pleasure in a well-kept briar packed with a gentle, fragrant blend like Sir Walter Raleigh. We've put a lifetime into mixing this rare combination of well-aged Kentucky Burleys that wouldn't nip a baby's tongue or a doe's nose. Sir Walter's got a delightful aroma all its own. Buck up and join the happy herd of Sir Walter Raleigh smokers. You'll have the world eating out of your hand! (Full tin, with heavy gold-foil wrap for freshness, at the unbelievably low price of 15¢.)

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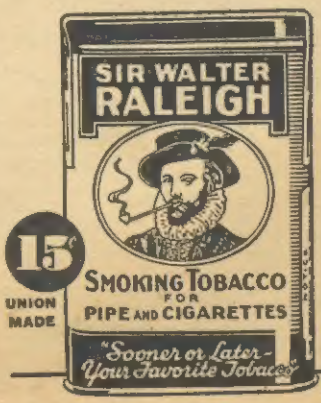
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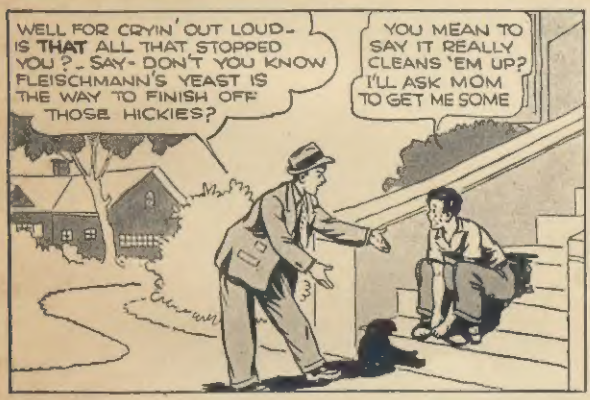
I DUN'NO – HE KEPT SAYING HE **COULDN'T**. HE WON'T DO **ANYTHING** LATELY – JUST STICKS AROUND HOME ALL THE TIME

NEXT DAY
WHAT'S GOT INTO YOU NED – WHY'D YOU TURN DOWN JUDY'S INVITE? WE HAD A **SWELL** TIME
WELL I'LL BET **YOU'D** HAVE STAYED HOME, TOO, IF **YOUR** FACE LOOKED LIKE MINE! **JUST** TAKE A SQUINT AT THESE **BLOSSOMS**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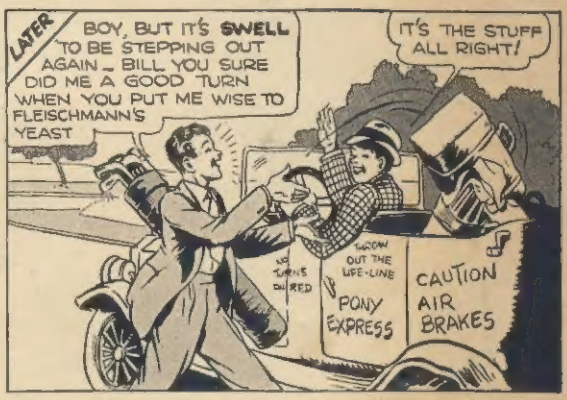
LATER
BOY, BUT IT'S **SWELL** TO BE STEPPING OUT AGAIN – BILL YOU SURE DID ME A GOOD TURN WHEN YOU PUT ME WISE TO FLEISCHMANN'S YEAST
IT'S THE STUFF ALL RIGHT!
WATCH OUT THE LIFE-LINE
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